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COLLOCE AND UNIVERSITY DISTINGS

DECEMBER 1946: War Memorials & Scholarship Boys & FM
Broadcasting & Landscaping & Investment Problems of Large State
Universities & Building Custodians & Fire Control & Annual Reports

GUEST EDITORIAL

LOUD ARE THE COMPLAINTS HEARD FROM ALL over the country in regard to the disposal of surplus property from World War II. Some are justified: some are not.

A careful look at the Surplus Property Act passed by Congress in the fall of 1944 reveals that many groups and interests other than the sorely beset educational institutions were promised favorable consideration. State and local governments had high priorities; small business was given protection; nothing must interfere with our export market or our domestic market. Too, there was a wrangle as to whether there should be one administrator or a board of eight, with the joint committee of Congress compromising on three. Our first complaint, then, is against the Surplus Property Act itself.

The Surplus Property Board, created by the act, turned over disposals to several agencies, including the Reconstruction Finance Corporation for capital goods and the Treasury Department (Procurement Division) for consumer goods. The latter was replaced successively by the Commerce Department, the R.F.C. and the War Assets Administration and the three man board gave way to a single administrator. With each change of administration, a period of confusion and delay followed. Our second complaint, consequently, is lack of continuity of policy and procedure.

There can be no question as to incompetence in handling some phases of the program. A special House investigating committee concluded that W.A.A.'s internal organization has been marked by ineptitudes, confusion and abundant opportunity for favoritism and fraud in operation of at least some of the offices. Our third complaint, therefore, is mismanagement.

Two conflicting objectives of the program have caused no little difficulty: prompt disposal and maximum dollar return. As opposed to the problems of locating the highest bidder, the low price brought by distress merchandise, errors on the side of price consciousness and delays in moving surplus property, the prompt acquisition of surplus at nominal prices by schools, colleges and hospitals for education and public health use could

have returned to the people in public benefits a value far greater than the pittance finally reaching the U. S. Treasury. Delay and a distorted sales policy, therefore, comprise our fourth criticism.

Finally, there is red tape. There are more than 20 regulations issued by the W.A.A., constantly being revised and amended, in addition to regulations and directives of other agencies, and there is no way by which an educational institution can automatically receive copies or be advised of their issuance.

It is also difficult to discover and locate surplus property. There are site sales, spot sales, listed sales, commission sales, scrap sales, industryagency sales and private sales. There are fixed prices, auctions, competitive bids and sales by negotiation. Sometimes the order goes to the W.A.A. regional office, sometimes to Washington, sometimes to the depot or site and sometimes to the state educational agency. The donation program of the army differs from that of the navy and the various procedures of the Army Service Commands differ from one another. There are certification symbols, certifications for discount, certifications for use and certifications for eligibility. There are letters of intent and justifications of need; there are certified purchase orders and fair and equitable distribution requirements. There is-Red Tape.

However, there is hope for the future. The new War Assets Administrator is sincerely trying to improve the situation. Army and navy donation programs have been broadened; the shortage of facilities for veterans' education has at last been recognized by Congress and by some of the top officials of the disposal agencies, and the Federal Works Agency is attempting to expedite the program.

No surplus materials will fall into the laps of educational administrators but constant effort and continuing follow-up should result in the acquisition of a substantial quantity of equipment and supplies so urgently needed to effectuate the No. 1 national emergency: veterans' education.—George S. Frank.



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College Business

J. W. CANNON JR. . Publishing Director

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Among the Authors



J. K. McELROY

J. K. MCELROY, fire prevention engineer for the National Fire Protection Association, who outlines suggestions for campus fire control in this issue, has had a varied career in the fire protection field. Following an eighteen months' assignment in Siberia, he returned to the United States and spent eight years with insurance companies before accepting appointment as chief of fire prevention and safety for the

F.P.H.A. For two years during the war he served as chief of fire damage analysis of the Economic Warfare Division at the United States embassy in London. Sports and foreign affairs constitute his major hobbies.



G. H. BUSH

GEORGE H. BUSH of Purdue University has been an expert in janitorial and custodial problems for many years. Now serving in Washington as special consultant on custodial services in the office of chief of engineers of the War Department, he has developed a custodial manual for army camps and hospitals. On the side, he likes to sing, play golf and travel and he enjoys good music, literature and

fine horses. His skill in human relations interpretation gets a good workout at home with his three sons. . . . JOSEPH STAPLES, instructor in French and director of public relations at Phillips Academy, followed graduation from Yale with study at the University of Paris and a stint in the Army Air Forces. A keen student of people and their reactions, he also indulges in photography and music.



R. C. DEMING

ROBERT C. DEMING, state supervisor of adult education for Connecticut, has been interested for many years in the utilization of radio as an educational and instructional medium in his native state. Able author, he has had several articles published in educational journals. He was at one time president of the department of adult education for the N.E.A. and more recently served as president

and chairman of the board of the National Council of Naturalization and Citizenship. Veteran of World War I and a Yale alumnus, he professes an interest in golf, fishing, meteorology, tennis and skating and, of course, radio.



J. W. GREGG

The inspiring campus of the University of California proves the effectiveness of JOHN WILLIAM GREGG'S ideas on landscaping. His broad conception of the relationship of landscaping to architecture represents the crystallization of his experiences in both the commercial and educational fields and in his world travels. His achievements from the time he was landscape architect for the St. Louis

World's Fair to his present assignment have brought him national recognition. . . . T. E. BLACKWELL, treasurer of Washington University, is one of the key leaders of the Central Association of College and University Business Officers. He is recognized as an authority on retirement annuities for college personnel.



McSWEENEY COMES TO ANDOVER

How one independent school invests its endowment funds in "scholarship boys"

I REMEMBER McSweeney when He first came to Andover, at the begining of his second or lower middle year. He was a stocky kid of 15, with a freckled face and a gap-toothed grin, who took examinations, games and collisions in his stride.

What was unusual about Mac? Maybe his I.Q.; it was so high we used to think there must have been a mistake in computation and yet his production kept pace with it. Maybe it was the way Mac would stay on his feet and play smart, hard football when he had just taken a thump that would have floored most of his fellows. Maybe it was Mac's way of running the pantry in the school dining hall, keeping a firm but friendly hand on the younger boys and turning up at full steam all the time.

But I think the most unusual thing about Mac was the fact that he was one of 10 children in a family whose income never topped \$1800 a year.

"My father," Mac used to say, "is a wonderful driver. He's never had an accident and he takes better care of his trucks than any other driver in any company he works for. But he always wants to be his own boss."

It was true that Mac Sr. never stayed with the same firm more than a year. He would get a little ahead, pull out, borrow some money to buy a couple of old trucks, run into trouble and debt and be forced out and back to driving trucks for someone else again. Yet Mac was able to go for three years to a school where the annual tuition was not much less than the family's annual income. How come?

Mac was benefiting from an educational custom that has long been es-

JOSEPH STAPLES

Instructor in French and Director of Public Relations Phillips Academy Andover, Mass. tablished in colleges and independent schools: he was getting a scholarship and a big one. A great many of the independent schools award scholarships on the basis of individual need; in the case of not a few schools, however, such awards are made without definite policy or scale and they are kept secret as if the fact that a boy was considered worth an investment were something to be ashamed of.

In many such instances, the arrangements are made by the headmaster of the school and may be in the nature of dickering which, although an accepted and pleasant business practice, seems ill suited to the dignified calling of education. Tuition rebates and kickbacks offer other ways of relieving the pressure on the family's education budget.

Phillips Academy, Andover, is a 168 year old school and, over the long period of its existence, it has learned a few valuable lessons. One of these

is that the regulation of scholarship grants is a matter of vital import to the school and that the establishment of a fair and uniform policy in the awarding of these scholarships is essential.

One man alone cannot be certain that he has the wisdom and vision to award an annual sum of \$100,000 and make sure that in every instance he has made the best possible investment. At Andover, a faculty committee, designated as the scholarship committee, under the chairmanship of the dean of students, rules on all applications and determines the school's policy.

The committee includes in its membership the director of the bureau of self help, the director of admissions and his assistant, housemasters from the younger boys' dormitories and the faculty counselor in charge of scholarship boys. This committee controls all of the scholarship funds except a small amount which is specifically set aside for the headmaster for use in emergencies.

Apart from the actual scholarships disbursed every year, at Andover there is a revolving loan fund available to parents who may wish to borrow, under extremely liberal terms, enough to help finance part of the year's school expenses.

HOW AWARDS ARE FIXED

The scholarship committee, anxious to preserve a fair and uniform standard for its awards, sent to a number of colleges and universities throughout the country—men's, women's and coeducational—for information on how they prepared scholarship application blanks. This is a delicate matter. Some parents are touchy about such questions as: "How much life insurance do you carry?" and "What is your principal source of income?" After sifting a large number of replies, the committee evolved an application

blank which appeared ideally adapted to Andover's purposes.

Awards are made according to a scale geared to the net income of the parent after allowances are made for interest on real estate mortgages, or indebtedness of other kinds, and for other dependents (\$500). For example, a parent whose gross income is \$6500 has the following fixed charges: \$500 annual interest on mortgage, \$250 annual interest on notes. He has two other dependent children, one a son in college with no scholarship aid. His son has qualified in all respects for admission to P. A. and is a boy of intellectual promise and high character.

The boy's application is reviewed by the entire committee in session and, unless there are unusual circumstances which would warrant a departure from the established scale, his son could receive a maximum award of \$800. In return for this, the son would be given one or more of the following jobs at school: work in the dining hall; concessions, such as newspaper subscriptions; laundry or tailoring contracts, and grant work in school offices. In some instances, after boys have proved themselves, they are awarded outright grants which are the income from specific bequests and which are technically known as "name scholarships." Andover disburses a large number of these which range in amount from \$150 to \$1200; the latter figure is the exact amount of the school's tuition charges.

Actually, every student at Phillips Academy, whether he pays the full tuition or not, is a "scholarship boy." The school spends nearly \$1800 a year on each student; the \$600 difference between this figure and the tuition charge is taken care of by the return on the school's invested endowment.

The scholarship committee's interest in him does not cease, however, when McSweeney has been awarded his scholarship and has begun his career at Andover. The special problems of his work, his study time and his athletic participation are all under the constant supervision of a faculty counselor and of the director of the bureau of self help.

Growing boys must have plenty of sleep and healthful exercise; at the same time, Mac's energies in his studies must justify the committee's faith in him if this scholarship aid is to be continued. By analyzing his study habits and perhaps by suggesting occasional revisions in his schedule, the faculty counselor often can enable Mac to succeed where others not similarly guided might fail.

There are millions of Macs in the United States who can profit from the high quality teaching, the superior equipment and the more closely supervised individual attention of our independent schools. And there are hundreds of independent schools which can more fully justify their place in their communities and in the world of education by becoming aware of their public responsibilities. Cannot the two get together?

THIS OR OBLIVION?

The time will come, unless the independent schools awaken to their obligation to society as a whole, when society may put unpleasant pressure on them and perhaps even threaten their existence.

I state that obligation here as a closing thought:

It is the responsibility of the American independent school to seek out, assist and train for future leadership boys of the greatest intellectual promise and the highest character, regardless of financial or family background, race, color or creed. If it fails in this it faces waning influence and eventual oblivion.

BUSINESS EFFICIENCY...

... is just as important to a college administrator as to the industrial or corporation executive. In the January issue Harry L. Wells of Northwestern will point out the essentials for efficiency in college administration and will present down-to-earth suggestions on how to organize and correlate departments on a business-like basis.

RESERVE YOUR PLACE IN THE SKY!

ROBERT C. DEMING

State Supervisor of Adult Education for Connecticut

THIS IS NOT A PROFESSIONAL ARTICLE on radio. Rather, it is one written for amateurs and educators by an amateur who is an educator by profession.

I am thoroughly convinced of the potential educational values in radio broadcasting and particularly in FM radio broadcasting, believing sincerely that "FM radio broadcasting, if properly used, is the greatest supplementary aid known to education." It can never take the place of the instructor any more than a new type of motor can take the place of the driver of a car but it can make the driving infinitely more efficient.

Another matter should be cleared up at once. I am not the successful instigator of a statewide FM network legislatively planned in Connecticut, nor am I the manipulator of a single transmitter or station. However, I have gone through all the planning, organization (and heartaches) necessary for such a project. Failure finally came through legislative inaction, affecting several score of other meritorious bills, rather than through any lack of merit in the plan itself.

If it is the business of institutions of higher learning to be thoroughly familiar with the latest and most valuable aids to learning, certainly their lack of foresight (with some notable exceptions) in anticipating and planning for the use of radio and in reserving the necessary frequencies or broadcasting channels is comparable to an owl's daylight vision. It reminds one of Yale's Professor Brewer who said he was "amazed at the infinite capacity of the student mind to resist the intrusion of knowledge."

Those who are familiar with education by radio and its proper use are enthusiastic, while those who are unfamiliar are not only indifferent but lacking in curiosity. This may be the result of familiarity with it as a means of household entertainment and news while unfamiliar with it as a method of instruction. At least three collegiate surveys have shown that the average citizen spends more than four times

the time listening to the radio that he spends reading.

Frequency modulation is accepted by radio experts and educators alike as the last word in fidelity broadcasting. This is important, for the success of the instruction varies inversely with the amount of "interference" or distraction for the students. In planning to operate an FM transmitter or a series of transmitters, one must recognize that high frequency broadcasting differs from regular broadcasting in that the impulses or "waves" are interfered with by hills or obstacles that are higher than the point of origin of the broadcast.

In Connecticut the movement to obtain a statewide educational FM network started in 1944 with the visit

Estimated Cost of Constructing and Servicing an Educational Broadcasting Station

(U. S. Office of Education, 1944)

		Est. Probable Co				
		Min.		Av.	. 1	Max.
Basic Transmission Equipment						
Transmitter, antenna supporting structure, tower lighting and						
frequency and modulation monitor	\$	5,400	\$	16,300	8	31,700
Studio and Control Room Equipment		-,	-		-	
Equalizer(s), "patch-board" and similar items		300		400		500
Speech input console (2 studio operation)		500		1,200		1,500
Microphones, stands, cables, connectors		450		650		1,000
Transcription turntables (2 complete units)		500		900		1,000
		300		900		1,000
Accessory Equipment						
Recording facilities (2 recorders with recording amplifier and						
associated accessories)		825		1,250		2,200
Remote input equipment (for programs originating outside of						
station studios)		-		320		530
Radio tuners (FM and AM) for receiving and rebroadcasting						
other station programs		75		130		320
Facilities for producing sound effects and playing sound effect						
recordings		200		650		750
Estimated Installation Costs		1,000		2,000		3,000
Studios (estimated cost of structural alterations, soundproof-		.,		2,000		-,
ing, wiring, heating, ventilating and other installations in-						
volved in converting existing space into two studios and		750		1 200		2 500
one control room)		750		1,200		2,500
Property (exact location unknown, but rural)		500		1,000		2,000
Construction (not including legal and engineering advice)		5,000		9,000		15,000
Totals	\$	15,500	\$	35,000	\$	62,000
Totals for Five Stations	\$	77,500	\$1	75,000	\$3	10,000
Estimates by Ctata Danata and						
Estimates by State Department	of	Educat	ion			
Contractual Services (includes repairs and transmission)	of \$		ion \$	4,000	\$	8,000
Contractual Services (includes repairs and transmission) Personal Services		2,000		4,000	\$	
Contractual Services (includes repairs and transmission) Personal Services Station Manager and Production Director		2,000 3,000		4,000	\$	5,000
Contractual Services (includes repairs and transmission) Personal Services Station Manager and Production Director		2,000 3,000 2,500		4,000 4,300 3,000	\$	5,000
Contractual Services (includes repairs and transmission) Personal Services Station Manager and Production Director Station Editor, Recordist, sound effects		2,000 3,000 2,500 2,300		4,000 4,300 3,000 2,500	\$	5,000 3,500 3,200
Contractual Services (includes repairs and transmission) Personal Services Station Manager and Production Director Station Engineer Station Editor, Recordist, sound effects Station Program Engineer (assistant to production director)		2,000 3,000 2,500 2,300 2,000		4,000 4,300 3,000 2,500 2,500	\$	5,000 3,500 3,200 2,750
Contractual Services (includes repairs and transmission) Personal Services Station Manager and Production Director Station Editor, Recordist, sound effects		2,000 3,000 2,500 2,300		4,000 4,300 3,000 2,500	\$	5,000 3,500 3,200 2,750
Contractual Services (includes repairs and transmission) Personal Services Station Manager and Production Director Station Engineer Station Editor, Recordist, sound effects Station Program Engineer (assistant to production director)	\$	2,000 3,000 2,500 2,300 2,000	\$	4,000 4,300 3,000 2,500 2,500	-	5,000 3,500 3,200 2,750 2,400
Contractual Services (includes repairs and transmission) Personal Services Station Manager and Production Director	\$	2,000 3,000 2,500 2,300 2,000 1,800	\$	4,000 4,300 3,000 2,500 2,500 2,000	\$	5,000 3,500 3,200 2,750 2,400 24,850
Contractual Services (includes repairs and transmission) Personal Services Station Manager and Production Director	\$	2,000 3,000 2,500 2,300 2,000 1,800 13,600	\$	4,000 4,300 3,000 2,500 2,500 2,000 18,300 91,500	\$	5,000 3,500 3,200 2,750 2,400 24,850
Contractual Services (includes repairs and transmission) Personal Services Station Manager and Production Director	\$	2,000 3,000 2,500 2,300 2,000 1,800	\$	4,000 4,300 3,000 2,500 2,500 2,000	\$	5,000 3,500 3,200 2,750 2,400 24,850
Contractual Services (includes repairs and transmission) Personal Services Station Manager and Production Director	\$	2,000 3,000 2,500 2,300 2,000 1,800 13,600	\$	4,000 4,300 3,000 2,500 2,500 2,000 18,300 91,500	\$ 51	5,000 3,500 3,200 2,750 2,400 24,850 124,250
Contractual Services (includes repairs and transmission) Personal Services Station Manager and Production Director	\$ \$ \$ \$	2,000 3,000 2,500 2,300 2,000 1,800 13,600 68,000 5,000 73,000	\$ 5 5	4,000 4,300 3,000 2,500 2,500 2,000 18,300 91,500 6,000 97,500	\$ 51	5,000 3,500 3,200 2,750 2,400 24,850 7,000 131,250
Contractual Services (includes repairs and transmission) Personal Services Station Manager and Production Director	\$ \$ \$ \$	2,000 3,000 2,500 2,300 1,800 13,600 68,000 5,000 73,000	\$ \$ \$	4,000 4,300 3,000 2,500 2,500 2,000 18,300 91,500 6,000 97,500	\$ 51	5,000 3,500 3,200 2,750 2,400 24,850 124,250 7,000 131,250 262,500
Contractual Services (includes repairs and transmission) Personal Services Station Manager and Production Director	\$ \$ \$ \$	2,000 3,000 2,500 2,300 2,000 1,800 13,600 68,000 5,000 73,000	\$ \$ \$	4,000 4,300 3,000 2,500 2,500 2,000 18,300 91,500 6,000 97,500	\$ 51	8,000 5,000 3,500 2,750 2,400 24,850 7,000 131,250 262,500 310,000

of Dr. R. R. Lowdermilk, specialist in radio of the U. S. Office of Education, who came to locate one large transmitter or a series of small ones. In the office of the state department of education, Dr. Lowdermilk originally plotted the location of each necessary transmitter for the state, using a geographical survey map for the purpose.

Having located the possible contributing public and private school systems and institutions, the highlands and lowlands, he asked for a brief tour by car for personal observation. Much of this was accomplished, and the good educator retired to Washington to complete his state map. This preliminary survey, pending a detailed engineering survey to determine property locations, has been found substantially correct. With much less effort, a local transmitter of limited range for a college or institution could be established.

STATE EDUCATORS AROUSED

It was the arrival of this map, to be followed soon by an estimate of the costs shown in the accompanying table, that started a round of public and association addresses and aroused the educators of the state to the opportunities at hand. First of all, the Connecticut Audio-Visual Education Association heard with enthusiasm the general plan to include public and private educational institutions in a statewide contributing and not a state dominated program and to organize a state radio council to determine the underlying policies.

Other organizations, such as the State Superintendents Association, the State Teachers Association and, finally, the State Board of Education itself, lined up behind the project and a subsequent bill was introduced by the state board. Many other state departments, seeing how they could disseminate information, backed the bill, too.

Here are some of the beliefs and convictions that moved the educators to push the bill to the utmost:

- 1. Equalization of educational opportunity—by bringing into every school and classroom in the state through the medium of radio the best possible instruction by selected experts and specialists, no matter how remote the location.
- 2. Relatively insignificant cost—by realizing that for the same expenditure one could build a school building for only 400 students, yet the network would reach every classroom and every home in the entire state. (Estimated

cost, \$370,000, including two years of operation and maintenance.)

- 3. Provision of educational opportunities for invalids and shut-ins; for adult education and extension courses; for in-service training of teachers; for drama, literature, music and instruction of all kinds; for counseling and guidance; for otherwise inaccessible audiences.
- 4. Education of the public in the policies of the educational officials.
- 5. Knowledge that a statewide participating program, available to supplement their own program at any time, would greatly encourage local systems and institutions to install their own transmitters and programs.

These beliefs are mentioned in some detail for they apply in greater or lesser degree to the installation of transmitters to cover a limited area. However, one factor not mentioned is reserved for special attention. The frequencies of the air are limited, available only by application to and permission of the Federal Communications Commission, and go to the first qualified applicants. Once allotted they cannot be conveniently regained; in fact, the situation is comparable to a building area upon which plants have been constructed. The necessity for action is still insistent and immediate, particularly as the professionals tell us that FM may soon supersede AM.

PROGRAM HAS 10 POINTS

Before and during the legislative session a state radio council of 20 members, representing organization and association interests for the most part, was organized and exists at present to guarantee and control the following conditions (these were never formally adopted):

- 1. That the program be contributing, rather than centrally controlled.
- 2. That the quality and standards of the program be comparable to those followed by the networks and commercial producers.
- 3. That high quality equipment only be used.
- 4. That the time schedule be allotted as fairly and equitably as possible.
- 5. That only bona fide educational institutions and organizations be allowed to participate with enrollment open to people meeting publicly advertised entering requirements, regardless of race, color or creed, and provided that graduation not entail obligations of an ecclesiastical character beyond graduation.

- That each institution pay the cost of studio and line transmission equipment for feeding its program into the network.
- 7. That, first of all, courses be extended to teachers in the basic technics in using radio in the classroom.
- 8. That the educational needs to be treated by radio be carefully ascertained.
- That the problems, goals and policies of education be presented to educate the public and educational officials more quickly.
- 10. That machinery be set up to evaluate continuously the results of the broadcasts to keep pace with and anticipate the needs of the state.

TABLE MUST BE UNDERSTOOD

The 1944 estimate of costs shown in the accompanying table was prepared from material distributed by the U.S. Office of Education, from catalogs and from other sources and can be highly misleading and discouraging unless it is realized that 1000 watt transmitters are involved, with 300 to 500 foot towers, and a doubtful sum for the purchase of rural property sites. On the other hand, legal and engineering advice is not included. My own belief is that, since most of this state is covered by one 250 watt transmitter, such would be adequate for almost any local station with a 10 mile radius as a minimum.

In other words, for \$8000 or \$10,000 almost complete equipment and operation could be obtained. Some of the radio engineering officials would provide gratis an estimate of local cost.

The word "almost" is used in the preceding paragraph because I do not know the availability of radio receivers at this time. Certainly with Mr. Petrillo's ban removed, the market should now expand.

One thing is certain: The public is much more interested in and more alert to the educational values in radio than are the educators themselves. It is a peculiar field in that distance is involved and one cannot expect the pioneering in a new field usually indulged in by private institutions. It is, at the most, centered in the college campus and extension courses are yet in their infancy.

Once statewide educational networks are established, the rush will be on. Those who know radio are confident that this will be very soon. Better reserve your place in the sky now!

HOW TO PLAN YOUR CATALOG

Compiled by Joint Committee on Public Relations for Methodist Educational Institutions

THIS BRIEF GUIDE MAY HELP THE busy and inexperienced editor to turn out a better college catalog than he has been producing.

1. PURPOSE OF CATALOG MUST BE DECIDED

Is it to be just a book of record or promotional literature as well?

2. CHOOSE A COVER CAREFULLY

Unless the catalog editor is an expert, obtain the advice of a good printer who understands the full purpose of the catalog and the general tone and character of the college.

Avoid flashiness and be careful of the use of pure white which soils easily. Use the same type family throughout the cover and do not crowd it with either words or design.

As for size, the majority of colleges today seem to prefer the 6 by 9 inch booklet, and there is some value in the uniformity.

3. TYPE FACES ARE IMPORTANT

Most experts agree that only one type family should be used throughout. The mixing of two or more tends to break up the continuity of the catalog.

The tone of the institution should determine the type family. Modernistic or commercial type faces detract from the appearance of dignity and strength, while extravagant or ornamental faces imply outmoded methods and long-haired faculty members. Among the type faces frequently chosen for the better catalogs are Garamond, Century, Baskerville, Old Style and Bodoni.

Headings should attract attention but not overbalance the page and they should be staggered in relation to each other to indicate the relative importance of the items that follow. Frequent use of boldface type tends to make a page appear spotty; when special emphasis is needed, italics or capitals and small capitals can be used. To ensure readability of the body of the catalog, 12 point type is recommended, with a possible reduction to 10 point in course and student listings and in the index.

4. LANGUAGE IS IMPORTANT

Far too many of today's catalogs have inherited the language of the previous century. Outmoded words and phrases are being employed to describe courses in aeronautical engineering and radio script-writing. If the catalog is to keep pace with the development of the college, its language must be today's.

The statement of purpose, the historical sketch, the description of the campus, the statement on requirements of admission, the course descriptionsevery paragraph in the catalogshould fit the tone and time of the college. For those schools which plan to use the catalog for promotional purposes, the materials should be written so that the average high school senior can readily understand them. The language should be concise.

5. ARRANGEMENT WILL VARY FOR DIFFERENT SCHOOLS

Universities and large colleges will employ different arrangements than small and medium sized colleges. The opening pages, however, may be similar.

The back of the cover, often blank, provides a good space for the brief statement required by postal regulations. The first page should contain the title, plus the words, "Catalog Number," date and, possibly, some small design. The second page could well contain the table of contents, followed on page three by the statement of purpose of the college.

Page four is often a good place for the college calendar. A fairly brief historical statement can be placed on page five, together with a clear and bonest statement of institutional rating and accreditation. The introductory pages can be rounded out by including on page six the location and description of the campus and its facilities. For the one-school colleges, admission, promotion and graduation requirements should be stated early in the

catalog, followed by a full and clear listing of fees and expenses. Student regulations and campus activities should follow closely in clear and factual statements.

The roster of administrative officers and faculty members probably should precede the course listings and should contain, at most, positions, degrees and where obtained. Listing of courses should be descriptive, concise and up to date. The register of students for the previous year usually is the nextto-last item. The index, the final item, must be full to be of real value and should be arranged and worded for the inexperienced catalog reader.

6. PICTURES PLAY A PART

Because they are for record only, the catalogs of large universities seldom contain photographs. It is different, however, with catalogs used partially for promotional purposes. Nevertheless, the catalog is seldom primarily a promotional piece and cost and space usually restrict the pictorial section to four or eight pages. Because photographs are usually printed on a different type of paper than that of the rest of the catalog, it is necessary to place them on certain pages or group them together. If the catalog editor is not an expert in photographic art, a good photographer's help in selecting prints is needed.

It is best to include several of the more attractive campus buildings, preferably with a foreground or background of trees and shrubbery. A chapel scene, with students entering or leaving, is always good for the church related college. An athletic scene, either of some team in play or of the stadium or gymnasium, is often helpful.

As a general rule, it is best not to place more than two pictures on each page and to break up this scheme with two or three full page pictures. It may be well in most cases to have the engraver "bleed" the cuts on either three or four sides. As in all other catalog problems, the advice of a good printer is invaluable here, too.

War Memorials:



BEAUTY TAKES PRACTICAL FORM ON



CAMPANILE will rise majestically from elaborate memorial parkway at University of Kansas.

HAROLD W. HERMAN

Lifeless statues have no place in today's plans for immortalizing college heroes. Look at these tributes: they are useful; their purpose will live on in the future THERE HAS BEEN A CONSCIOUS AND consecrated attempt on the part of colleges to create memorials that will suitably recognize the contribution of those millions of college students who donned the uniforms of various branches of the armed forces of the United States and its allies.

Emphasis, in the main, has been on creating a war memorial that will become a living tribute: a structure, a park or a fund to be utilized by the students of today and by those to come. Heroic figures in bronze, mounted on marble pedestals, are not being designed as it is felt that these do not properly memorialize the contribution of the soldier, sailor or marine of World War II.

TYPES OF MEMORIALS VARY

Although many colleges and universities have not yet decided what form their war memorials will take, considerable numbers have begun or completed their plans. Among the more prevalent types are the following: scholarship funds given by friends or by relatives of those who died; recreational parks, college unions, chapels, dormitories, gymnasiums and field houses; stadiums and alumni buildings subscribed to by alumni, students and others.

At the University of Kansas an elaborate memorial parkway and campanile will become a scenic asset to the campus and a majestic reminder to future student generations of the sacrifices made by former Jayhawkers in World War II. Dominating the driveway will be a 175 foot campanile which will house a carillon. In the top of the tower will be an observation room, permitting an unrestricted view over the Kaw and Wakarusa valleys. To conform with the majority of the other university buildings, the architects have suggested that the campanile be constructed of native Kansas stone.

In the base of the tower will be a memorial hall on the walls of which will be great bronze plaques carrying the names of the more than 8000 K.U. men and women who served in the armed forces during the war. In the center of a room 30 feet high will stand a huge metal globe on which will be marked the various areas of the earth where K.U. men and women were stationed.

At Evansville College in Indiana the campus itself will be the official student memorial for the men of the city. Going farther than the idea of memorializing its own students, the college has accepted an invitation from Vanderburgh County to permit the college expansion program to serve as the memorial for all those from the county in World War II.

Although a building will be the actual memorial, its symbol will consist of a shrine at the main entrance to the campus. Tentative plans call for two pylons flanking an open terrace, with an ornamental flag pole in the center. The pylons are expected to be large enough to permit space for meditation. On the walls will be tablets inscribed with the names of the men and women of the county who served their country during the war. Ceremonials and other types of meetings can be held on the terrace.

AVENUE OF TREES PLANTED

At Dakota Wesleyan University in South Dakota a memorial avenue of trees was planted in 1943, known as Memory Lane. Forty evergreens and forty poplars, alternately planted, were set along the main walk of the campus. It is anticipated that the poplars will grow rapidly and eventually be removed, leaving the cedars to form the lane. Then, at the base of each cedar, it is planned to place a marker in memory of a former student who gave his life in the war.

Kansas State College has planned a chapel and chime tower for its 5000 alumni and students who served in the armed forces. The chapel, to be built of native limestone, will be in a

AMERICAN CAMPU

wooded grove on the campus. It will be nondenominational and will serve as a focal point for religious groups on the campus. When not being used by the college, the chapel will be available to religious groups of the community.

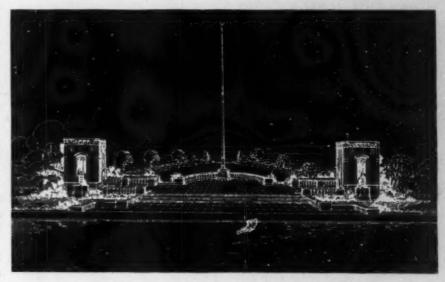
Seating capacity of the larger all-faith chapel will be about 600 persons; the smaller chapel, in the wing, will seat 65 and be used primarily for individual meditation. The large chapel will have a pipe organ, the gift of the Duckwall family of Abilene, Kan. In the meditation chapel will be a small organ for use at any time by anyone wishing to play sacred music.

A large stained glass window at one end of the large chapel will symbolize its purpose; smaller stained glass windows along the sides will be individual memorials. Cost of the chapel is expected to be in excess of \$275,000, the entire building the gift of alumni and friends of the college.

Central Missouri State Teachers College at Warrensburg, through its alumni association, is launching a campaign to raise funds for a memorial chapel. The chapel will be a small, intimate building, having a tower in



OBSERVATORY TOWER, housing memorial plaques and shrine, will be architectural highlight of union building planned by Lawrence alumni.



PYLONS, flanking open terrace sketched above, will provide space for meditation at entrance to Evansville campus. McGuire and Shook, Indianapolis, are architects for college expansion program. MEMORIAL GYMNASIUM, below, is planned for Marion Institute in Alabama.





CHAPLE AND CHIME TOWER of native limestone will honor the 5000 Kansas State College students and alumni who served in the war.

keeping with the towers now on the campus, but sufficiently high to dominate surrounding buildings and having the subsidiary rooms and facilities necessary to accommodate a program of conference, meditation and worship.

A college union building has been selected by many institutions as the most suitable form of memorial in that it can be constantly utilized by the student body as the center for extracurricular activities.

The University of New Hampshire is planning to construct a \$250,000 union building with a large variety of club features included. The building will conform to the contours of the

hill on which it is to be erected in order to minimize excavation costs. It will be located well in front of the hill with a long single story constructed at the second level on top of the hill. This story will be used for a ballroom.

The union building will include the following facilities: a ballroom to serve for student dances and also as an auditorium for institutes, meetings of state associations and university groups; a general lounge for men and women; bowling alleys; a game room; offices for student groups, organizations and publications; alumni offices and reception room; refreshment room with

soda fountain; commuters' room; faculty room; music and art rooms.

At Lawrence College, Appleton, Wis., a union building being planned by alumni will feature an observatory tower as an important architectural highlight of the building. The tower will house the memorial plaques and the shrine to honor Lawrence's war dead.

The building will be linked to the present women's gymnasium, making it possible to use the main floor for institutional dances and banquets. Included in the building will be offices for student activities, conference rooms, grill, game room, lounge and reading room and bookstore. A major portion of the building will be air conditioned.

Westminster College at New Wilmington, Pa., is planning a combination auditorium and student building. The college union activities will be located on the ground floor of the structure and will include lounge, snack bar, bowling alleys, kitchen and dining room and offices for student publications. Above will be the auditorium, which will be planned to seat approximately 1600 people and especially designed to serve the dramatics program of the college, one of the institution's outstandingly successful projects.

Other colleges and universities planning or considering the erection of college union buildings as memorials include Whitman College, Marquette University, DePauw University, Ashland College, Illinois Wesleyan University and Texas A. and M.

At a number of colleges and universities, plans for additions to their physical education departments' facilities are being featured as student memorials. In this way, the structures in every sense of the word become living memorials to former students who lost their lives while in the armed forces.

Pomona College at Claremont, Calif., has announced completion of plans and specifications for the construction of a \$250,000 men's gymnasium as a war memorial. The building will honor the 62 men and two women who lost their lives and the eight still reported as missing in action during World War II.

The gymnasium will be built on the western portion of Alumni Field, incorporating the present memorial training quarters built in 1922 to honor those who fell in World War I. The memorial gymnasium will be built on two levels: main floor and base-

MEMORIAL UNION BUILDING proposed by University of New Hampshire will conform to topography of the campus.



ment. On the main floor will be offices for the staff, classrooms, gymnasium and memorial room.

The basement, with its locker rooms for varsity and freshman teams, its rifle range and its facilities for the military program, will contribute to the full utility of the building. The position of the dressing rooms in relation to the physical education plant will permit ready access to and from the nearby playing fields. The original wing will accommodate visiting teams and will also include lockers for students and faculty. The open air swimming pool, which remains in its present location, will be modernized and equipped with bleachers.

GYMNASIUM UNDER CONSTRUCTION

At Marion Institute, Marion, Ala., a memorial gymnasium is now under construction. The main floor will be used also for indoor drill, dances and social gatherings. At one end of the balcony over the lobby will be a lounge or reception room; at the other balcony end will be located the offices and rooms of the athletic department.

The memorial lobby, with its marble wainscoting and terrazzo floor, will prove an appropriate setting for the individual plaques in memory of the alumni who made the supreme sacrifice. The roll of honor of all other alumni will be placed here also as a permanent record.

Other institutions planning memorial gymnasiums include the University of Dubuque, Denison University, Aurora College, Baker University and Clarkson College.

One of the most spectacular war memorials will be the \$1,000,000 field house to be constructed at Lexington for the University of Kentucky. The architects have drawn up an original plan of contemporary design, based on classical lines. The main entrance, at the center of the structure, will be through an exterior memorial court with paved terrace, colonnade and landscaped background into a memorial lobby. The lobby will be the architectural feature of the building and will house trophy cases and other memorial features. The general ticket offices will open off this lobby.

Ramps at both ends of the memorial lobby will lead to public foyers and, from these foyers, four aisles will connect with the main cross aisles entering the coliseum. There will be two tiers of seats in the coliseum. The seats will be arranged at both sides and at one end of the playing floor to accommodate a total of 12,000 people, with only 3000 seats in the end group. For such events as pageants, commencement programs and festivals, when the full seating capacity is required, a stage will be set up at one end of the playing floor.

The field house will contain also a swimming pool, locker rooms, showers for team and faculty, trainers' rooms, equipment room and lecture room. The usual necessary athletic department offices will be located in this building.

Numerous colleges and universities will pay tribute to their war dead by the establishment of large scholarship funds and endowments. At Colgate University the alumni are dedicating \$50,000 from each of their annual funds to establish and maintain a living memorial in honor of those alumni who gave their lives in World Wars I and II.

These sums will finance 13 national and 13 regional four year scholarships to men entering Colgate each September. The awards will be made to recognize character, potential leadership and performance in the characteristic civic activities of school and community. Amounts allowed will be in accordance with need, from an honorary stipend of \$100 to a maximum of \$500 for the regional and \$1000 for the national scholarships.

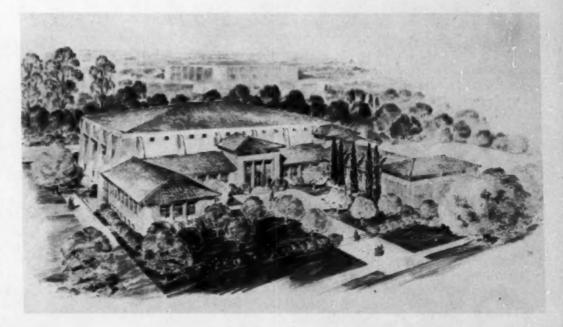
OTHERS PLANNING SCHOLARSHIPS

Union College alumni recently raised \$200,000 to endow 20 scholar-ships; Alfred University, Ohio State University, New York University and the College of William and Mary also have established new scholarship funds.

At Carthage College construction has begun on a \$220,000 men's dormitory which is being erected as a war memorial to the more than 550 graduates and former students who served their country in the armed forces. A plaque, inscribed with the names of those who died, will be placed in the dormitory lounge.

In such manner and in other appropriate ways have the colleges and universities of America remembered the contributions of their sons and daughters to their nation in time of peril and preserved for posterity a tribute to their heroic dead.

MEN'S GYMNA-SIUM honoring Pomona College students who fell in World War II will cost \$250,000 and will incorporate World War I memorial training quarters erected there in 1922.



Investment Problems

OF THE LARGE STATE UNIVERSITY

ROBERT M. UNDERHILL

Treasurer, Regents of University of California

IN GENERAL, THE SMALLER STATE university does not have serious investment problems. Either it is considerably limited by statute in the type of its investments or the investment management is cared for by an elective officer or a state board.

What is a large university or what is a large fund may be defined by many people in many ways, and I shall have to make an arbitrary assumption to limit the field to be discussed. In the institution with a small investment fund and the institution with a relatively small enrollment, the investment of the college funds is generally assigned to an elective state officer, such as the state treasurer, or to a board of state officers.

Occasionally, on that board there is one representative appointed by the board of control of the institution of higher learning. The securities are usually kept in the hands of the state treasurer and it is not uncommon to find the class of securities limited to U. S. government bonds, bonds of the state or its political subdivisions and, sometimes, the bonds of other states and farm mortgages on cultivated lands.

CONTROL BY STATE TREASURER

In one of the western states, the preference is for small loans on home and farm property. The funds, however, may be placed in other safe interest bearing securities but specifically not in the bonds of the state itself, with the exception of general fund warrants maturing in one year. Since it is not apparent, according to the statute, whether the legislature of the state had a lack of confidence in its own securities or a keen sense of the advantage of geographical distribution, I omit the mention of the state. It was noted that, in some circumstances. funds of the institution were kept by the state treasurer who was empowered to sell all the securities and to use the money to purchase and retire the other general obligations of the state. The state then issued and guaranteed a nonnegotiable 5 per cent bond which was to be held by the state treasurer for the benefit of the college.

In another institution, a state bond issue held in a considerable block by the college was not paid at maturity and other funds, which were for the benefit of the institution, came into the state control and were used for other purposes. These politely were known as "diverted funds" but the state legislature passed an act to pay the institution 6 per cent a year on both those issues. Under this happy state of affairs and excellent return, the matter of the diversion and the maturity was not called to the attention of the state authorities by the governing board which, until recently, received 6 per cent interest from a state with credit justifying the issuance of securities on the 1 to 2 per cent basis.

Despite these two examples, I do not wish to indicate that I advocate the handling of state university funds in all cases by the state authorities. I believe that as the fund grows it will be more actively and productively administered by those who benefit from

It may be fairly well assumed that the control by the state authorities of the college funds originated through the provisions of the Land Grant College Act by which Congress in 1862 granted the institutions 30,000 acres of public land for each senator and representative in Congress. In the western states that land was within the boundaries but in the eastern states much of it was in the Midwest.

RETURNS ON LAND GRANTS

Under the provision of this act, known as the Morrill Act, minimum sales prices per acre were provided. It was further provided that the monies be invested in bonds of the United States or the state or other states or invested by the state having no state bonds in any manner in which the legislature of such state shall have assented in safe interest bearing securities to yield a fair and reasonable rate of return to be fixed by the state legislature and that the principal thereof shall forever remain unimpaired. This fund is particularly mentioned in many state statutes and the provision for the guarantee of the fund is set forth. With the guarantee, the states, in many cases, provided for control.

This allotment of public land has been an important source of endowment to the various state universities and, even in a then sparsely populated state (California) with few congressional representatives in 1860, the proceeds of these lands have created a separate endowment of practically three fourths of a million dollars.

REAL PROPERTY

In a trust of any considerable size which is subject to free discretion in management, there can be little essential difference between the problems of investment of an endowed university and those of a state university, nor should there be much difference between the investment problems of a state university and any large trust. The method of accumulation of a state university fund and some public problems, however, are worthy of mention. One of these problems is the matter of tax exemption. Real estate held by state universities is generally exempt from real estate taxes. This throws a considerable advantage in the way of increased net earnings as against income to be received from corporate bonds and there have at times been tendencies on the part of state institutions to place a considerable amount of the investment account in real property.

This has been brought about also because state institutions frequently are recipients of bequests wherein they are given the rest and residue of an estate and it is quite common that in the residue there will be real California, Michigan, Minnesota and Texas are state universities with large endowment funds. Other colleges supported by the states may be expected to attract gifts and to manage their own trusts if freed from restrictions

property. The property may be nonproductive but what is nonproductive at one time may not continue to be and the institution can well afford to hold land for development if it is tax free. Although this would seem to be an advantage for the institution, it can turn out to be a decided problem. I shall give you the example of the experience of the University of California for it may not be uncommon in the management of college trusts.

In 1930 the total of our endowment and pension funds was \$16,500,000 and of that a little more than \$5,000,000 was invested in real property. Although there were many changes in the holdings, the real property investment figure remained practically constant up to a year ago; even now it is at \$3,500,000, but that out of a total of \$43,000,000—a drop from 32 to 8 per cent.

REAL ESTATE HOLDINGS REDUCED

The reason for that drop is twofold: the development of nonproductive property and a change in the market to make the sale advantageous-but, more important, a suggestion to the university to put real estate back on the tax rolls. Our legislature, as I shall mention later, has no control over the investments or investment policy of the university. A committee suggested in 1933, however, that the regents consider a gradual and orderly reduction of the real property, as opportunities arise without harm to the funds, in order that an inordinate tax burden might not fall on any community where the regents would acquire a concentration of real property and this they were acquiring in two areas.

The result of large bequests of real property in these two centers and the purchase of a considerable amount of property at the main seat of the university meant that from the tax rolls was coming a considerable assessed valuation. Since it would not be usual for the municipalities to reduce their budgets because of the lower assessed

valuation, the taxes were spread a little more heavily on all members of the community.

To the local residents, proud as they might be of the presence of the institution in their community, it meant that they were paying an extra cost for the support of a state institution which, in their minds, was more properly a charge against the state. Requests by taxpayer associations and local realty boards have had their effect and, since the state institution is dependent principally for its support upon appropriations from the people, it must be careful not to perform a conspicuous act to place itself in a position of difficulty with the appropriation body of the state.

It is therefore deemed an appropriate and farsighted policy to reduce the amount of real estate held, even though it might slightly reduce the productive yield of the investment account, and to spread the burden more directly on the state rather than on one or two communities selected as attractive mediums of real estate investment. Apparently this problem is not uncommon and, if not previously considered, is worthy of thought.

MORTGAGES

The mortgage field has for many years been considered an attractive investment field for endowment funds. Ten or twenty years ago mortgage loans were found in many university accounts, particularly in many of the state university funds. The competition for good mortgage loans has been severe in the past few years and the funds, with a relatively small amount for investment each year, find it difficult to compete with the banks, particularly with the insurance companies which are constantly in touch with owners who might be potential borrowers, and the scouts of the insurance companies are far more able to obtain the attractive loans.

for the municipalities to reduce their Even if there were a free field for budgets because of the lower assessed loans and loans are still available, the

state university is faced with one problem that it should consider. If the state university is one of considerable geographical extent, it is difficult for the usually understaffed administration of the institution to service real estate loans all over the state and, therefore, the governing board chooses one or two areas where property values are stable and concentrates the investment in those areas. From a management viewpoint, this is satisfactory and the investing officer may become an authority on values in a few communities. He cannot become an authoritative appraiser on properties all over the state, however, and as soon as the institution starts making loans in one area, particularly if times are not too good, a borrower in another area may ask someone to use his influence to get a loan from the university to save him from dire distress. Such a loan, of course, is one which would not be attractive for investment but incurring the displeasure of those upon whom the university depends is a serious matter. It may therefore be safer for the institution to stay in an investment field more remote from someone's personal problem.

LOCAL INVESTMENTS

The state institution and its income are free of federal taxation and, where its investments are restricted by statute to federal, state or municipal bonds, it will immediately suffer a serious cut in its endowment yield. These protective features, placed upon the state fund by statute, are in many instances depriving the institution today of a yield comparable with that obtained by institutions with free choice, managerial ability and a keen sense of trustee responsibility. The great increase in federal taxation has resulted in the sale by some institutions of their tax free securities, thereby causing a concentration in investment in a restricted group of securities.

Geographical distribution unconsciously becomes a problem of a state college. Perhaps among the tuition-free advantages to residents of the state attending their own institutions is the fact that a great number of the students are local residents and intend to remain so after graduation. Their investments are local and their gifts to the university to increase the endowment fund quite frequently are of local securities. This is often the case when securities are transferred by bequests and the public institution board com-

posed of local men and local investors, as is not required with private colleges, tends to approve the purchase or retention of securities in businesses with which it is acquainted.

Concentration in a corporation is not of itself improper but, since the state institution derives practically two thirds of its revenue from taxes in the area, it is well to have its investment fund producing income in other areas to avoid the effect of a catastrophe of any one of a number of characters which might happen. Without casting any reflection upon the industry or business of the community, the management of the trust should consider the investment of most of its funds outside of the state.

OUT-OF-STATE INVESTMENTS

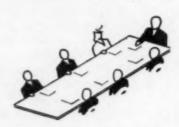
Although the yields on securities in the West have for many years been a little higher than yields on securities in the East, we have actively sent funds out of the state, seeking good securities elsewhere. It has been with determination that our fund has changed from 1930, when more than 80 per cent of it was invested in California bonds, stocks, real estate and mortgages, to the present time when the percentage inside the state is 27, and I assure you that there are plenty of issues within the state which stand on our books and which we are happy to have there.

It was a practice in past years for institutions to advance endowment funds to themselves for construction and general purposes and to pay interest on those advances. In carrying out this practice, which appears to have decreased to a great extent, the institution must be mindful of its relationships with the state and of the proper source of capital improvements. It must recognize that it serves in two capacities: principally as an institution for teaching and research and, therefore, under the necessity of increasing its plant for those purposes and, second, as a trustee to invest wisely and manage properly funds donated to it for specified purposes.

If it makes such advances, a practice which should be avoided if at all possible, it is incumbent upon the institution to use proper trust practices which call for an equity and an earning capacity to support any loan. Seldom, if ever, are the plant additions, although vitally necessary, separable and salable as would generally be expected in support of a trust in-

vestment. It is a duty of the institution, if it must follow this practice, to heed carefully the effect of such advances in the minds of the supporting public and the appropriating bodies and the effect there may be upon the institution in the matter of future capital appropriations and the encouragement of donations.

Now it is time to discuss in a little detail a few of the larger university endowment funds. The general statements given before all affect such funds but it may interest you to know something of the specific large fund.



Again, I may say what is a large fund is not certain but, despite the fact that they are a fraction of the Harvard fund and do not approach the Yale or Chicago funds, the endowments of California, Michigan, Minnesota and Texas cannot be considered small when compared with important endowed colleges, such as Columbia, Cornell, Johns Hopkins, Massachusetts Institute of Technology, Northwestern, Pennsylvania, Princeton, Rochester, Stanford, Vanderbilt and others. I am sure that I have, for lack of space, probably unfortunately omitted the name of the alma mater in which many of you are interested and I offer my apologies. I shall discuss these large state university funds in alphabetical order and the first one is the one I know the most about.

UNIVERSITY OF CALIFORNIA

The University of California was created by a provision of the constitution of the state rather than by legislative enactment and its board of regents is given full power of organization and government, subject only to such legislative controls as may be necessary to ensure compliance with the terms of the endowments of the university and the security of its funds. The corporation is vested with legal title and the management and disposition of its properties and has the power to take and hold, either by purchase or by donation or in any other

manner without restriction, any real or personal property for the benefit of the university.

Under this broad power the regents have determined the investment policy, directed the investment and held the securities and properties. They are permitted to invest in every class of security and in real property and to enjoy the exemption from federal, state and local taxation. Under such system, the fund may be actively managed and given more immediate attention than a fund managed by an outside board and the regents may, from time to time, change the investment policy as is appropriate under the circumstances and in accord with conditions of the market.

In addition to the present endowment fund of practically \$36,000,000. the board also invests a pension fund. now \$7,000,000, and, at present, plant funds of \$4,000,000, awaiting use for the construction of buildings, and short term treasury balances of \$9,-000,000. The plant funds and treasury balances which are invested are generally placed in short term government funds and are not considered in any percentage distribution over the various general classes of investment. The \$43,000,000 represented by endowment assets and the pension fund. however, was invested in the following percentages as of June 30, 1945:

•	O L	See us or June 50'	27 22
	Bonds		55
	Common	Stocks	18
	Preferred	Stocks	12
	Real Esta	te	9
		Loans	
	Miscellan	eous items, such	as
		ts on the sale of pro	
	erty an	d other items	4

The policy is now to hold 30 per cent in equities and the proceeds of real estate sales are reinvested in common stocks.

The fund is divided into several pools and a number of specific investments. One of the problems of its management is to become acquainted with the requirements of hundreds of separate trust funds, some of which may be pooled and others which may not. In such investment, however, it is possible to purchase long term issues for the permanent trust funds, to sell them after amortization to the plant funds account as they come to, say, within five to seven years of maturity at the market appreciation customary for high grade, medium term securities and, later, as they become short term paper, to sell them to the

treasury account, producing a satisfactory yield, profits for the various pools along the way and avoiding brokerages which would be involved by original and separate sales and investment for these various pools.

The yield on the endowment fund itself for the last year was 3.85 per cent; on the pension fund, 3.60 per cent; on the medium term and short term plant funds, 1.50 per cent, and on the treasury balances invested in government bonds, 0.88 per cent. All these represent a gradual increase in the last three years, despite the calls and refunding.

UNIVERSITY OF MICHIGAN

The University of Michigan fund is also managed in accord with the creation of the university by the constitution of the state. The constitutional provision is short and gives the regents general supervision of the university and the direction and control of all expenditures from the university fund.

Peculiarly, the only specific duty of the Michigan regents is to elect and I quote, "as often as is necessary a president of the university." Apparently, that marked warning has never interfered with the university's power to obtain a competent administrative head and has not thrown the college into the administrative difficulties experienced by some institutions where the board does not have the independence granted to California and Michigan.

The fund as of June 30, 1945, amounted to \$17,000,000 of which about \$500,000 is in the hands of the state treasurer; \$2,000,000 in the hands of outside trustees, and \$14,-500,000 in the hands of and managed by the university. The distribution of this fund shows that about \$11,000,-000, or 81 per cent, was in bonds, 3 per cent in mortgages and contracts, 5 per cent in real estate, 6 per cent in common stocks and 3 per cent in preferred stocks. The college has not been a common stock buyer, having made only one considerable purchase some years ago, but it has retained certain stocks that have been given. It has increased over the last two or three years its investment in preferred stocks but the future is still low in relation to the total investment.

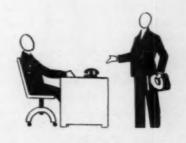
Of the bonds held, government securities have been increased to 60 per cent of the bond portfolio and municipal bonds have decreased but still

represent a considerable figure—15 per cent of the bond account. With the fund principally invested in bonds and three fourths of that in governments and municipals, the yield for the year ending June 30, 1945, was 3.05 per cent.

In the annual financial report for the year ending June 30, 1943, it was stated that the university's investment policy has been outstandingly successful in the protection of principal, that educational institutions depending for operating expenses on income from endowment funds have shown and are now showing a larger rate of return, but that if principal losses are taken into consideration it is doubtful if the net results have been superior to those in Michigan. The report continues to say that, deriving its main financial support from the state, the institution is not under compulsion to produce any certain specified income from its trust funds and, therefore, has no reason to reach, with attendant risks, for additional income which, though desirable, is not an absolute necessity.

As stated in the last two financial reports, the investment policy of the university has increasingly emphasized the conservation of principal in comparison with the production of income and the policy has been adhered to even though it meant a decided drop in income from investments owing to declining interest rates of high grade bonds in recent years.

A recent report, however, called attention to the opinion of the former vice president that the policy might



well be reexamined with a view to determining whether or not it could be modified to some degree without loss of safety and with greater usefulness for the various purposes for which the funds were entrusted. This reexamination is now in process, and inquiries are under way as to the experience of others whose investment policies have not been as conservative as those of Michigan.

UNIVERSITY OF MINNESOTA

The University of Minnesota fund, which totals \$25,000,000, is divided into two groups. The first divisionthe permanent university fund of some \$16,500,000—is handled in accord with provisions of the statutes of 1943. The funds are invested by the state board of investment, consisting of the governor, the treasurer, the auditor, attorney general and a commissioner to be appointed by the regents of the University of Minnesota from among the board members. Investments are restricted to bonds of the United States, the state of Minnesota and (with the exception of a minor division of the total fund) any other state, whose bonds yield not less than 1 per cent, or any school district, county, city, town or village of the state, whose bonds yield not less than 2 per cent. I trust that the statement that the bonds of any other state must yield at least 1 per cent is not a prophetic warning to all of us who are struggling with the matter of investment and attempting to make some kind of return.

This fund was invested as of June 30, 1944, as follows: a little more than \$9,000,000 in federal securities, about \$550,000 in state securities outside of Minnesota and the balance in Minnesota public issues. The yield in the state administered portion for the year ending June 30, 1944, was 2.86 per cent. The balance of the Minnesota endowment fund, some \$9,000,000, is under the control of the regents and was invested 87 per cent in bonds; 3 per cent in preferred stocks, and 10 per cent in common stocks.

Of the bonds totaling \$7,900,000, approximately half were in United States government issues. The fund held, in addition, about \$1,000,000 in real estate. The securities held in this fund administered by the university yielded 2.89 per cent and the real estate, 4.8 per cent. The combined yield on the funds held by the institution was 3.09 as compared with 2.86 on the fund held by the state, the income being held down by the large block of governments.

The institution purchases and holds both preferreds and commons. Its maximum percentage of commons—12½ per cent—is smaller than that usually found in institutions which purposely purchase them rather than hold them after receipt by gift.

UNIVERSITY OF TEXAS

The fourth and last large state university fund to be described is that of the University of Texas which, as set forth in the financial report for the year ending Aug. 31, 1944, showed a total investment of \$61,000,000 of which \$57,000,000 was in the permanent university fund and \$4,000,000 in funds other than those held by the state. This permanent university fund is an interesting one, as it was created by a grant of 2,000,000 acres of west Texas land on which oil was discovered. The constitution prohibits the legislature from appropriating funds to the institution for the construction of buildings and, therefore, this land was provided with the direction that the proceeds from it were to be permanently invested and the income therefrom was to be used for the construction of buildings.

While this \$57,000,000 fund is held and managed by the University of Texas, a separate university, the Texas Agricultural and Mechanical College, established its right to one third of the fund for its building program. The Texas University fund is thus, in effect, reduced by \$19,000,000. The lands are carried on the books at a figure of \$10,000,000 and from the proceeds, \$43,000,000 of bonds have been purchased and cash amounting to \$3,500,000 is available.

The laws of Texas require that the permanent university fund be invested in bonds of the state of Texas, of the United States, of Texas counties, cities and school districts.

As of Aug. 31, 1944, 77.5 per cent of these bonds were United States securities, and the average rate of return on the portfolio was 2.83 per cent. This permanent fund, as stated, is in reality the base of a continuing source of funds for the construction of new buildings and in lieu of annual legislative appropriations received by other state universities. It is not an endowment for the purposes for which endowments are usually created.

COMMON STOCK PURCHASES

The other \$4,000,000, not held in the permanent university fund and, therefore, not controlled by the statutes mentioned previously, has up until recently been controlled by laws which restricted the investments to the usual bond and other trust securities. In 1945 the legislature amended the Texas Trust Act so as to incorporate the so-called Massachusetts or Prudent

Investor's Rule. Under this act, common stocks would be legal investments but the institution has not purchased either real estate or common stocks and the small holdings of these two classes of investments in the general university endowment account were acquired by gift or bequest. In fact, while other bonds are legal investments for this \$4,000,000 fund, the institution has done little investing in bond categories that are not tax exempt.

THE INVESTMENT OFFICER

The state institution, being primarily dependent upon the public for support, must be careful so to manage its affairs that its investment administration will lose none of the judgment of an independent trustee. To continue to attract donations for permanent purposes the investment manager, by whatever title he is known, must come to be a trust officer and the finance committee, to some extent, a trust committee. It must at all times in the administration of its trust recognize as its first obligation its duty to carry out the donor's intent which must have been the advancement of some educational purposes or it would not have been accepted.

In order that there may be a clearly disinterested investment attitude, the investment officer should not be the public relations officer. In his contacts and activities, particularly if the fund is large, he should give his attention to the principles and practices of strict trust investment despite the frequent apparent necessity of the use of a trust fund to serve two or more purposes.

If the investment division can be a separate division, it is a much simpler task to represent the institution properly before the public bodies and, at the same time, to keep faith with the truster in the administration of the trust. These two important functions of the university administration are not one and the same and would appear to be more capable of high attainment if handled and viewed separately.

The last four college funds which I have described have been growing steadily and continuously over the years. While the other state universities do not have funds of comparable size, there can be no doubt that the funds will grow and the time will come when their funds will be sufficient to permit the institutions to manage their own trusts, provided legisla-

tion can be effected. Moreover, if that management can be free of restriction, as in the cases of California and Michigan, the yield on the funds can increase considerably over the yield obtained in investment in tax free securities.

I do not believe that under any free fund there can be any difference in formula for investment of a state fund and of any other properly managed trust. The freedom given to most of the private college funds in the United States and to a very few of the state funds has proved that the management of prudent men devoted to the institutions as represented by the membership on the boards of trustees or regents, or whatever name by which they are known, has been productive of a fair yield, has increased the fund and brought about a confidence which has resulted in increased benefactions in support of the important work they are conducting. The note of caution in the Michigan report that investment of a less conservative nature which may produce a higher yield may well result in no greater net return because of capital losses is well given. In the other large free fund I have described, however, the yield has been higher and the capital gains year by year have exceeded the capital losses.

MORE ENDOWMENTS WILL COME

A college trust fund is made up of many individual trust accounts, with many separate and distinct requirements, and the investment of such fund as in connection with any other fund, private or public, can bring about the best results only if those entrusted with the duty of managing the fund have a knowledge of the requirements of the specific trusts. In the university account these may all be regarded as separate and individual clients and, in each case, with the problems of not only a life tenant but a remainder-man.

Through the evidence given of the size of four of the large college funds of the country, it is certain that many of the universities may, though supported by the state, come to be considered to some extent endowed colleges. In addition, through this endowment, they may render service which the state would not be expected always to support. Under these circumstances, both elimination of restrictions and successful management will result in increased confidence, increased gifts and wider public service.

WHETHER OR NOT AN ANNUAL FInancial report has public relations value will depend upon the report itself. If the content of the report has merit and if the items of public interest are clearly and briefly presented, such report can be used to good advantage in the field of public relations.

The standard arrangement of the material constituting the report is, of course, the form recommended by the National Committee on Standard Reports for Institutions of Higher Education. Adaptations of this standard form and amplification to set forth and emphasize information peculiar to a particular institution add interest to the report and increase appreciation of it on the part of all interested persons. Superior quality has publicity value in any market.

It is always of interest to members of the governing board of an institution to have summarized in a brief way in a letter of transmittal pertinent facts that are significant and easily interpreted. Institutional reports are different in form from the ones they are accustomed to receiving and they like to have such facts as an introduction to what is sometimes a baffling bunch of figures.

CAN CREATE GOOD WILL

Here is an opportunity to focus attention on special gifts or out of the ordinary transactions that have occurred during the year. In an endowed institution this is an appropriate place to show change that has occurred in each of the fund divisions by listing the amount of each fund at the beginning of the year and the amount at the end of the year to show the growth. An explanation of the source of the additional funds is always a matter of interest.

All such information is, of course, to be found in the report in its proper place, but frequently members of governing bodies are inexperienced in interpreting institutional reports and they enjoy having just such brief presentation of facts as they are eager to know about. The good will thus created will almost always elicit a word of praise for the treasurer. Some trustee will tell a trustee of another institution, his banker friend or some other person about the excellent work

BUILDING GOOD WILL by means of ANNUAL FINANCIAL REPORT

F. L. JACKSON Treasurer, Davidson College

of the treasurer of an institution that he can call his own.

If a particular phase of the work has been well handled during the year, it is well to make special mention of this. The idea easily carries over in the mind of the trustee that all phases of the work have been pretty well administered.

In addition to the usual report, a treasurer can create good will on the part of those to whom he reports if he will, every few years, include in the back of his report tabulation showing the growth of the resources of the institution from year to year, beginning as far back as the records are available or as far back as the records have particular significance. A curve line graph showing the increase in endowments and a similar line for plant funds, reflecting the growth by years, will dramatize information that will not remain hidden under a bushel.

Should it be possible honestly to compare some part of the report with that of a similar institution well regarded, the treasurer not only will create the impression that he is efficient but will give his trustees a talking point that they are not likely to overlook. As a rule, trustees are proud of their appointments and like to have something to talk about when they return home from the meeting. They have an opportunity to do this in making a report to the body that appointed them and frequently they are not adverse to being quoted in the newspapers.

Practically every institution has its publicity bureau. The university or college public relations man is always anxious to get a summary of the annual financial report for the newspapers. Facts that can be released

should be prepared for him to be released as a separate item or as a part of the report of the annual meeting of the trustees.

Institutional policies as to what shall be released and who shall be responsible for the release, of course, have to be respected. Some worthy colleges seem to prefer to empkasize their poverty in the hope that some generous individual will be inspired to save the institution. To my mind the public likes to "bet on a winning horse"; therefore, I think a somewhat boastful attitude is better.

IS TOOL FOR PRESIDENT

The publicity value of a treasurer's report probably lies more particularly with the president of the institution than anywhere else. The president can make or break a good treasurer. He is the official spokesman of the college and can commend the treasurer's work to the trustees if it has merit and send the trustees away feeling that all is well in that department of the institution.

The president has frequent opportunities to quote from the treasurer's report in publications that go to the alumni and in speeches that he makes before all sorts of assemblies. Matters handled through the treasurer's office are generally of public interest and there is no competition or danger of jealousy with other departments.

No department of institutions of higher learning, not even athletics, has rendered a more conspicuous and valuable service than has the college business office as it has been developed over the last quarter of a century. It has had publicity value and the annual report of the work of the office still has publicity value.



LANDSCAPING

LOOK TO THE FUTURE, FOR PLANTS DO GROW

JOHN WILLIAM GREGG

Professor of Landscape Design and University Consultant in Landscape Design University of California

LANDSCAPING OF THE COLLEGE campus is subject to two interpretations: one deals with the purely academic and administrative factors influencing the physical aspects of a master plan; the other takes into consideration ornamental plant material as decorative elements to embellish the architectural ensemble, its accompanying circulation and zoning factors. It is this latter phase with which we are concerned here in the Golden West.

This country of ours is the meeting place of the flora of the world. In addition to our own unlimited native species and varieties, our wide range of climatic and soil conditions is conducive to the successful growing of an extensive variety of exotic flora. Our landscape architects are practicing in a "plantsman's paradise," or so it would seem to the average individual.

This extensive flora, coupled with an equally extensive range in architectural styles, materials of construction, soils, climate and topography, makes landscape planning a complex, however, rather than a simple problem.

It is difficult indeed for the landscape architect to know where to stop in his selection and use of ornamental plants in campus planning, particularly where educational values, as well as esthetic effects, have to be considered and where such practical factors as vehicular and pedestrian traffic, night lighting, fire hazards, policing and maintenance are extremely important considerations.

The late Dr. W. W. Campbell, president emeritus of the University of California, once remarked to me: "I want this campus to be planned in so orderly a fashion and so beautifully that our young men and women, who spend some of the most formative years of their lives here, will absorb some of that orderliness and beauty and reflect it in their own lives and in the life of the community in which they may later find themselves." What a challenge to anyone playing a part in the planning of a college or university campus!

The flora to be grown on a college or university campus should be so selected as to be of educational and scientific value. The result should be a veritable outdoor plant laboratory where such departments as botany, forestry, entomology, plant pathology, landscape design and other sciences and arts might find valuable instructional and research material but it should be so composed as to produce that order and beauty which should reign supreme in any work of art, especially landscape art.

Campus plantings do not have to be in the style of a botanical garden or a nursery show yard to be of educational value. "One of this and one of that" does not make a composition.

As a rule, a college or university campus covers a considerable acreage with buildings in massive scale and arrangement, all of which calls for open mass areas and mass plantings, in good scale and proportion, particularly in their relation to building architecture. Academic buildings need a fine setting, a pleasing foreground and approach. The transition from one building to another should be gradual.

Good architectural lines and details should be emphasized by plantings rather than obliterated, as is often the case. The landscape architect frequently overlooks the fact that architecture is the dominant element in the whole campus picture and that plant life, while important, must nevertheless be subservient to it. Major and

minor axes must be strengthened, vistas defined and open areas planned to create a feeling of extent and spaciousness. In all this, plants play a major rôle. Furthermore, a campus is a live thing where seasonal color effects should supply important notes in the composition.

Shade, prevailing winds, sidewalk and road hazards are other factors to be taken into consideration in the selection and location of trees and shrubs. Unless carefully selected, located and arranged, they may create a policing problem, especially at night if they obscure an otherwise adequate lighting system.

LAWN AREAS IMPORTANT

Probably one of the most important elements in any campus plan is the development of open lawn areas. Well maintained lawns provide a restful note in the landscape, reflect the shadows of trees and buildings, tend to increase apparent extent, serve as foregrounds to many buildings and are definitely a unifying element.

The whole campus planting problem involves due consideration of "future effect." Plants do grow and time changes their scale and, oftentimes, their form. What will the picture be fifty or a hundred or more years hence? With a constant demand for "quick effect" the future is too often forgotten, with the result that the composition never attains the satisfying mellowness that only age can produce.

Finally, we come to the problem of maintenance. A suit may adequately clothe a person but the best effect is produced when that suit is kept neatly pressed and cleaned. Similarly, many a fine planting plan has been ruined by lack of constant and intelligent maintenance.

Some university administrators seem to think that once the planting is done, Mother Nature will do the rest. Well, sometimes she does and sometimes she doesn't. Money is spent without question in keeping academic buildings and appearants in repair for use and appearance. Why not keep the land-scape in a comparable condition for use and beauty, to say nothing of protecting the original investment?

In landscaping a college campus, let your imagination revel in magnificent fancies, but exercise discipline for their practical and esthetic realization, secure in the knowledge that educational institutions will endure through the ages to come.









ORDER AND BEAUTY reign supreme on University of California's inspiring campus. 1. Bowles Hall. 2. Agricultural Hall. 3. Faculty Glade. 4. Stephens Union. Opposite page: Campanile.



Engineer, National Fire **Protection Association**

could sweep your domine trailer colony, Quonset huts that buildings at any hour. And at your own invitation, too

RECENT DISASTERS HAVE EMPHAsized more than ever before the tremendous importance of fire prevention and fire protection programs and the moral obligation of all public institutions to maintain such programs at a high level of efficiency.

The large amount of new construction on college campuses and in the communities surrounding them warrants fundamental consideration of the fire safety of all buildings as they are planned and occupied. In view of the pressing need for additional classroom buildings, laboratories and housing for the influx of additional students far beyond the capacity of most educational institutions, it would also be well for college authorities to review the loss of life or property possibilities in existing structures.

At one educational institution of my acquaintance, an old multistoried, highly combustible dormitory building with open wood stairways was occupied in part in the basement by the college maintenance repair shop. Inspection disclosed that the repair shop was filled with a large accumulation of wood shavings, oily paint rags and other hazards endangering the lives of 100 boys housed on the upper floors.

The dormitory was not protected by automatic sprinkler or automatic fire alarm detection equipment. College authorities stated that they could not afford adequate protection or a new building to house the repair shop facilities and claimed that there was insufficient space for them in the fire resistive gymnasium building.

As a third alternative, a large vacant room in the basement of the college museum building was suggested as a much more appropriate location than the dormitory for the highly hazardous repair shop. When the proposal was made, the inspector was startled at the reply: "We can't do that because we have valuable historical and art objects in the museum!"

Basic measures for life and safety fire prevention and fire protection are common to all types of structures whether they are for permanent or for temporary use.

Too often, architects, perhaps unknowingly, take chances with the lives of people who will eventually use a structure in spite of the fact that there are recognized fire prevention and protection standards. Fire protection engineering personnel in either municipal, fire insurance company or fire insurance rating bureaus is more than happy to advise owners and architects on requirements. Too many times, fire protection engineering experience is called upon to "second guess" after a building has been constructed.

Common sense dictates that provisions for retarding the rapid spread of fire throughout a building should have primary consideration. Older combustible buildings with open stairways are a prime danger. It is safe to say that there is scarcely a college or university in the country which does not have one or more buildings seriously deficient in stairway protection.

The shocking loss of life in last summer's two hotel fires in Chicago and Dubuque, Iowa, calls attention to the hazards of the use of nighly combustible interior finishes. Among other serious defects, which were to result in the loss of life in these hotel fires, the use of highly combustible fiber board with its flash fire possibilities in both hotels and the beautiful but highly combustible walnut veneer paneling in the lobby of the La Salle Hotel were responsible for the initial rapid spread of fire throughout the ground floor areas.

In the La Salle Hotel fire the unprotected, open, noncombustible stairways in a building of brick, steel and concrete permitted smoke and toxic gases to spread rapidly throughout the upper floors. In the Canfield Hotel fire at Dubuque, the fire department was unable to prevent total destruction of the 50 year old brick section of the hotel because of open wood stairways and combustible floors.

Unfortunately, it is the all too prevalent custom to depend on exterior fire escapes for the evacuation of the occupants. In the La Salle Hotel fire the exterior fire escapes were usable owing to the general fire resistive character of the structure. In the Canfield Hotel fire, however, one of two exterior fire escapes was blocked as flames swept out of the first floor windows and doors and roasted alive one of the guests who attempted to use it.

The National Fire Protection Association organized the safety to life committee responsible for the preparation of the Building Exits Code (widely used throughout the world as a standard for safe egress from buildings of all types of occupancy) shortly after the Triangle Shirtwaist Factory fire, March 5, 1911. Common sense suggests that the provisions of the N.F.P.A. Building Exits Code be followed by those responsible for the safety of the students and faculties of educational institutions.

In my recent travels about the country, I have noticed many colleges and universities with large scale housing, classroom and ancillary construction programs. Buildings under construction are in their most hazardous condition during the period in which they are being constructed, whether built of fire resistive or combustible materials. It is impossible to stop and ask whether or not college authorities have made adequate provision for the safety of the construction materials by insisting that the contractor provide a fire prevention and protection program during construction. Such programs should include enlisting the cooperation of the local fire chief.

I often wonder if the fire departments have been given an even break in the provision of temporary access roadways and water supplies so as to enable rapid fire fighting in the event of fire during construction. Too often the fire chief is held responsible for factors which are beyond his control without owner cooperation in providing the necessary facilities for him to do his job.

The college dormitory offers the greatest possibility of loss of life on the campus. Most new dormitory construction is fire resistive throughout. What campus in the country, however, can boast that it has no dormitories of combustible construction? Fire prevention engineers who make inspections of college dormitory buildings are surprised if they do not find a mass of substandard, twisted, improvised extension cords in dormitory rooms.

The location of kitchens in basements, the lack of hoods over the ranges and the lack of provision for extinguishment of grease fires are hazardous, especially so if the stairs are combustible and open to the upper floors

Too often laundry drying facilities lack in common sense protection: electric irons not provided with pilot lights or unprotected laundry chutes which are an open invitation to the spread of fire and smoke throughout the upper floors of a building.

Fire prevention engineers are generally agreed that a flat prohibition against smoking is more likely to result in a serious fire from careless handling of smoking materials than are common sense regulations which avoid surreptitious smoking. Ordinary prudence demands that those responsible for life safety in college dormitories investigate the need for automatic sprinkler protection and automatic fire alarm detection equipment.

Most colleges face a great shortage in classroom space. It is also true that modern college classroom and laboratory buildings are, for the most part, of fire resistive construction but there are few educational institutions without the old, combustible, open stairwell classroom buildings which are subject to total loss from a myriad of causes.

The fire prevention engineer's judgment of college management is oftentimes based upon his inspection of janitor closets in classroom buildings where careless handling of rubbish and wastepaper or failure to hang up oily mops (which have spontaneous ignition possibilities) causes him to lose respect for the college administration regardless of how high the academic standing of the institution may be.

One instance comes to mind in which a college built a central heating plant to replace individual building heating 12 years prior to a fire prevention and safety inspection. In one basement the inspector found 10 tons of coal left after the removal of the heating plant 12 years previously! On questioning, the business manager cheerfully admitted that he did not know the coal was in the basement, that he had never made an inspection of the college buildings below the first floor level or in the attics.

Satisfactory wartime experience in the provision of private and public fire fighting requirements to protect adequately more than 500,000 temporary war housing units demonstrates conclusively that early consideration of these requirements will result in less than national average fire destruction for residential, mercantile and other types of occupancy. If it is necessary to do so, private fire brigades can be organized, equipped and trained to protect college buildings. All college students and employes should have instruction which produces fast action in the event of fire in a college building. Too many times lives are lost when employes delay even a few minutes in calling the fire department.

The housing of veterans and their families in trailers, Quonset huts and other temporary housing facilities carries with it the obligation to teach them the hazards and proper operation of oil burning cooking and heating equipment. With thousands of temporary houses being erected at colleges all over the country, it behooves those responsible to assure water supplies adequate for fire fighting. How many college business managements have consulted the local fire chief as to whether or not he is equipped to handle a fire in new structures, let alone the existing buildings on the campus? My guess is that not many have done so.



and UNCLE SAM

T. E. BLACKWELL

Treasurer and Secretary to the Corporation of Washington University

DO PAYMENTS MADE BY COLLEGES and universities toward the purchase of deferred annuity contracts for their employes constitute taxable income of the recipient?

In a ruling dated March 12, 1935, addressed to the Teachers Insurance and Annuity Association of America, Guy T. Helvering, commissioner of internal revenue of the Treasury Department, made the following statements:

"The bureau has concluded that contributions made by colleges and universities for the purpose stated do not constitute income constructively received by the teachers in the year or years in which such contributions are made. Such payments are not, therefore, required to be included in the federal income tax returns of the teachers.

"However, the prior ruling of the bureau, to the extent that it holds that the aggregate of the amounts contributed by the college or university and the teacher for the provision of a retirement annuity constitutes 'the aggregate premiums or consideration paid for such annuity' within the meaning of section 22(b) of the Revenue Act of 1934, is modified to exclude from such 'aggregate' the amounts contributed by the college or university and not returned as taxable income by the teacher in the year or years when such contributions were made. Amounts received by teachers in the form of annuity payments are to be returned for federal income tax purposes in the manner and to the extent provided in section 22(b) of the Revenue Act of 1934."

When the tax law was amended extensively in 1942 because of the great increase in the number of pension trusts established by industry, the association took up the question again with the Treasury Department and obtained a current ruling. The following is an excerpt from a letter from

George E. Johnson, attorney for the T.I.A.A.:

"In 1935, following conferences with representatives of the Treasury Department, we received a specific ruling regarding the treatment of our annuity contracts under the federal income tax law. A copy of this ruling is enclosed.

"Section 162 of the Revenue Act of 1942 entitled 'Pension Trusts' carried the following statement among others in subsection (c): 'Section 22(b) (2) (relating to taxation of annuities) is amended by inserting at the end thereof the following new subparagraph:

'(B) Employes' Annuities.—If an annuity contract is purchased by an employer for an employe under a plan with respect to which the employer's contribution is deductible under section 23 (p) (1) (B), or if an annuity contract is purchased for an employe by an employer exempt under section 101 (6), the employe shall include in his income the amounts received under such contract for the year received except that if the employe paid any of the consideration for the annuity, the annuity shall be included in his income as provided in subparagraph (A) of this paragraph, the consideration for such annuity being considered the amount contributed by the employe.'

"Colleges and other nonprofit organizations come within the exemption specified in Section 101 (6) of the law."

An extract from a Treasury Department letter signed by the commissioner of internal revenue addressed to Teachers Insurance and Annuity Association of America, dated Feb. 6, 1945, reads:

"Reference is made to your letter of Dec. 12, 1944, in which you request a ruling relative to the amount that should be used as the 'aggregate premiums or the consideration paid' in determining the amount to be excluded from gross income according to the

provisions of section 22(b) (2) of the Internal Revenue Code, with respect to amounts received by a beneficiary under your retirement annuity contract, in the event of the death of the annuitant before beginning to receive annuity payments under such contract.

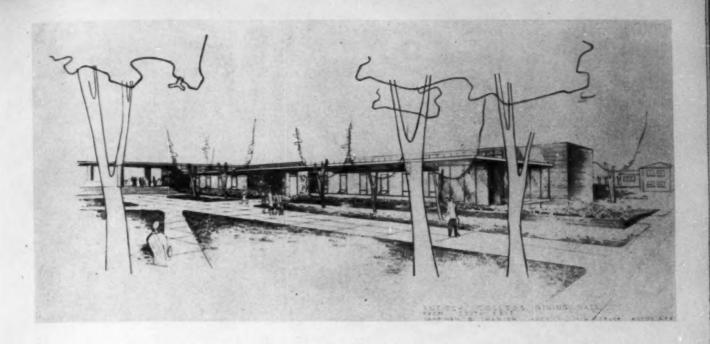
"In a specimen copy of your retirement annuity contract which was furnished this office with your letter of April 1, 1942, it is provided that if the annuitant dies before annuity payments have begun the beneficiary shall be entitled not merely to a refund of the amount paid for the annuity but to the equivalent 'of the accumulation,' which consists of the aggregate of the premiums paid less loading expenses and contingencies accumulated at compound interest.

"It was held in a bureau ruling of Aug. 26, 1942, that the benefits to be so paid in the form of periodic installments to the beneficiary are regarded as annuity payments to a successor annuitant and the amount to be excluded from gross income is to be determined according to the provisions of section 22(b) (2) of the code with respect to amounts received as an annuity under an annuity or endowment contract.

1935 RULING CONFIRMED

"In a bureau ruling of March 12, 1935, symbolized GC:I:LS, A-248381, a copy of which was enclosed in your letter of Dec. 12, 1944, you were advised that a prior ruling of the bureau, to the extent that it held that the aggregate of the amounts contributed by the college or university and the teacher for the provision of a retirement annuity constitutes 'the aggregate premiums or consideration paid for such annuity' within the meaning of section 22(b) of the Revenue Act of 1934, was modified to exclude from such 'aggregate' the amounts contributed by the college or university and not returned as taxable income by the teacher in the year or years when such contributions were made.

"In view of the foregoing it is held that the amount to be used as the 'aggregate premiums or the consideration paid' in determining the amount to be excluded from gross income according to the provisions of section 22(b) (2) of the code, with respect to amounts received by a beneficiary under your retirement annuity contract, is the aggregate of the premiums paid by the deceased annuitant."



ANTIOCH'S MASTER PLAN

IN THREE PHASES, EACH OPENS THE DOOR WIDER ON A HARMONIOUS FUTURE

W. B. ALEXANDER

Vice President and Dean of Administration Antioch College

A GOOD CAMPUS LIKE A GOOD LIFE or a good curriculum needs careful design.

Antioch College trustees, administrative officers, faculty and students have discovered that it is a good exercise for the eyes to look far into the future, to examine all possible developments and considerations that might eventually affect present decisions; hence a campus plan, in phases 1, 2 and 3, and a master plan.

Developments could stop at any phase and be harmonious but the existence of more speculative plans for the future ensures that, should development go on, all would continue to be sensible and harmonious.

The history of Antioch campus planning is not long. The original campus was simply a 20 acre rectangle carved out of the gridiron of streets in Yellow Springs, Ohio. In the 1920's, President Morgan experimented with the idea of moving the campus to the western bank of the glen near the Yellow Spring. Some sketches of this plan still exist but the move would have required a prohibitive expenditure all at once and the plan was

abandoned. So the new buildings for which money had been raised—power plant, science building and gymnasium—were built around the old campus and the large investment in these buildings fixed the location.

In Antioch's current planning, it was decided that the optimum enrollment should be 950 students with some 600 on campus at any one time. With this increase of 200, it was clear that the living accommodations for students would have to be extended. Other buildings were needed. A new campus plan had to be made.

WHO PLANS?

The firm of Saarinen and Swanson was finally chosen to make a long range plan for the development of the campus, with Max G. Mercer, an alumnus, as associate architect.

The first thing the architects asked for was a statement of the college's long range plans and needs. A campus planning committee mushroomed and fell to work, its instructions to the architects being something like this:

1. We want our buildings to be placed in the most useful and functional relationship to one another consistent with esthetic and harmonious appearance.

- Recognizing that Glen Helen, Antioch Hall, with its towers and the lawn between it and the glen, and the science building are the most nearly permanent physical assets of the college, the campus plan should be built around them.
- 3. Convenient access to the campus from Xenia Avenue and the village of Yellow Springs should be provided but the existing gridiron of streets cutting through the campus should not be regarded as sacrosanct.

NOW, WHAT BUILDINGS?

As a basis for deciding upon future expansion, the architects made a study of all the existing college buildings and their present functions.

The campus planning committee's final instructions to the architects were to provide future sites for:

1. A new set of women's dormitories to house 220 women students, retaining Norment House with a capacity of 30 girls. Endowment funds could be invested in these buildings

and interest and principal paid back out of room rents.

2. North, South and West halls to be men's dormitories. Twenty year old West Hall would eventually be given up as a dormitory which might mean a new, somewhat larger men's dormitory to succeed it.

3. A new dining hall to succeed the cafeteria on the ground floor of North Hall and the tea room across the street. Like the new women's dormitories, this would be self amortizing and would be built as soon as possible.

 A new Fels research building, authorized by the board of trustees of the Fels Foundation to be built soon.

5. A new library building with shelf space large enough to accommodate 200,000 volumes with the possibility of expansion to 350,000 later and to contain seminar rooms and offices for the social science and hu-

manities professors. It is hoped to raise funds for this building by or before the college centennial in 1953.

6. A new theater and arts building to contain a large theater seating between 750 and 1000 persons and to serve also as the college assembly hall.

7. A new infirmary.

8. A union building.

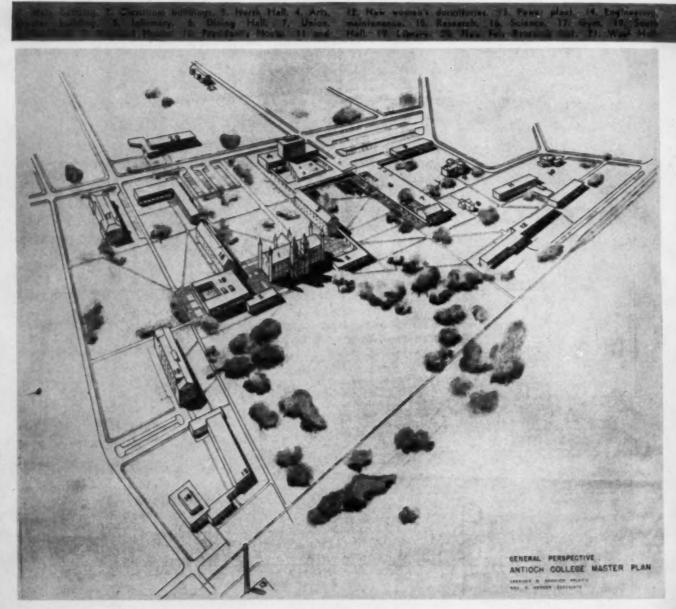
A permanent maintenance building with shops, garages and storage space.

10. Additional classroom space.

The committee asked also that the plan provide room to add other buildings in the future, such as a home economics building, a new and larger gymnasium with a swimming pool, a new Antioch School, a new nursery school, an inn and more research buildings.

Originally it had seemed that the new dormitories would have to be located, like West Hall, between the main dormitories and Xenia Avenue. The architects came up with a new idea: to place the women's dormitory quadrangle parallel to the glen. The quadrangle would have an open side toward the view of towers and main campus lawn and would form a pleasant pocket to soak up the southern winter sun.

It would also, however, be a stone's throw from the railroad. Only after assurance that there was no likelihood of the railroad traffic increasing materially was it decided to overlook this objection. The railroad tracks are, as a matter of fact, several feet below the level of the campus and Mr. Birch's endowment to Glen Helen enables us to landscape the edge of the glen in such a way as partly to conceal the railroad from view if not from hearing.



The next step was to fix the site of the dining hall which needed to be near both men's and women's halls and also accessible to visitors. The long, low building recommended by the architects and facing on North College Street might eventually reach across President Street to join with the present library and (by the time a new library is built) become the nucleus of a union building. An arcade along North College Street would connect the whole area and bisect another pedestrian arcade from President Street to the campus. A new infirmary was placed on the plan just to the north of the dining hall so that food could be served to it conveniently.

HEARTLAND

The location of the library was perhaps the most difficult question of all. It was finally placed between Antioch Hall and the science building because,

VOMEN'S DORMITORIES sketched above will house 220. Location of

dormitories. The architects suggested a low wing at the east end of the building to be balanced later by a low classroom building on the other side of Antioch Hall.

Antioch Hall with its beloved Gothic towers would then rise from the lower buildings clustered around it as a medieval cathedral rises from the roofs of the town around its base. This conception of Eero Saarinen's thus solved the problem of how to relate Antioch Hall to the lowslung modern buildings which would have to be built near it, the solution pointing up the contrast between perpendicular rising spires and flat buildings on a broad base on either side.

Mr. Saarinen also suggested a paved terrace around Antioch Hall, the terrace to be several feet higher than the present grade to give Antioch Hall a broader base and to reduce the height of the steps leading into the building, thus putting them in better scale.

FACADES AND VISTAS

The next problem was where to put the theater and arts building. Since it should be accessible to visitors and have ample parking space around it, the architects finally recommended a site across the street from the now nonexistent Corner House. A theater building has to be tall over the stage to provide room for flats, grids, curtains and what not. Next to Antioch

Hall, this building would be the largest and highest on campus and would be our front door or village façade.

From the campus side, the building, with North Hall stretching forward on its right and the new dining hall stretching forward on its left, would create an open quadrangle, like an outdoor room. This outdoor room, with its reflecting pool, would be a serene spot in the midst of the most active part of the campus. It would look down to the shaded lawn in front of the present library and would frame the white shaft of the Horace Mann monument in the distance.

The plan calls also for the part of South College Street which separates the old "main campus" from the science building to be erased and a new east-west street to be cut through behind the science building to allow for through traffic and to give service to the buildings on that side of the campus.

The present foundry building will be taken over gradually during the next few years for engineering laboratories and the maintenance department. A site for additional scientific or research laboratories is shown between the science building and the foundry although there is no present need for such a building.

There is also a site for a possible new and larger physical education building set in the midst of the athletic fields beyond the science building. This is probably for the very dim future as the present building has a considerable useful life remaining.

PHASE OF OUR YOUTH

The perspective of the campus shown is neither the first nor the last stage of our future campus. In the architects' plans, phase 1 shows buildings which will be built as soon as priorities lift (women's dorms, dining hall, Fels building). Phase 2 shows buildings which we hope to have money to build by 1953, our centennial year (library, union building, theater and arts building, small classroom building, maintenance building). Phase 3 shows buildings which we know we will need eventually.

The master plan allows for buildings which we may never have but proves that there is a place for them. (There is nothing sillier than a campus which has been planned as a beautiful tight little unit and then along comes an unforeseen need which looms outside the unit forever.) Our picture of the campus is about phase 3. Antioch will be well equipped, though not luxuriously or lavishly, when it becomes an actuality. In the meantime, the realization of phases 1 and 2 will immeasurably improve the college's physical resources.



SPOTLIGHT ON

GEORGE H. BUSH

Custodian Counselor c/o Purdue University

THE JOB OF KEEPING COLLEGE AND university buildings clean and well maintained is one that requires good planning, well designed buildings and accessories, adequate storerooms and equipment and a carefully selected personnel which has been properly trained to do the assigned tasks. The efficient, courteous maintenance worker or building custodian is just as essential to the training of youths in our institutions of higher learning as is the well trained faculty member.

Owing to the war demands for personnel, building custodians of colleges and universities were diverted into other activities, leaving the job to untrained workers who, in many instances, were poorly equipped physically or lacked inclination for the work. This lack of experienced building custodians is now apparent and shows up even more because of the increased demands being made on the facilities of all colleges and universities.

Since no figures are available to show how well the building custodian has been selected and trained for his job, a questionnaire was formulated and mailed to 60 representative colleges and universities, picked at random throughout the United States. Twenty-four replies (or 40 per cent) were received and are used as the basis for this presentation.

TITLE OF DIRECTOR

Answers to this question list twelve separate and distinct titles as shown in table 1.

Table I—Titles of Directors of Building Custodians

Title	No. of	Casi
Supervisor of Janitor Service.		4
Supt. Bldgs. and Grounds		3
Head of Janitors		3
Custodian Foreman		2
Supt. Care of Buildings		2
Foremen of Janitors		
Chief Building Custodian		1
Building Custodian		1
Supt. of Physical Plant	+	1
Building Inspector		1
Assistant to Bldg. Supt.		1
Supt. of Operations	***********	1

In some instances, the directors of building custodians at the smaller colleges or universities have the most imposing titles as compared with those at the larger institutions but each carries about the same responsibilities.

Nineteen of the 24 answers to the questionnaire indicate that the institution has a director of building custodians and one does not. The others failed to answer this question.

NUMBER OF BUILDING CUSTODIANS

The 24 colleges and institutions report a total of 1498 persons listed as building custodians of whom 204 are women, 62 are foremen, 98 are specialized mechanics and 174 are miscellaneous helpers.

Since these 24 institutions represent about 1.5 per cent of the total number of colleges and universities in the continental United States, there are

proportionately about $\frac{1498}{}$ x 100, or $\frac{1.5}{}$

99,860 building custodians in all, engaged in the task of keeping the buildings clean, healthful and usable for their assigned purposes.

In most instances, men are used to do this job, but quite a few women are employed also. Students also are

Custodians

Good maintenance personnel lost during the war has not been recovered. George Bush surveyed the custodian situation recently and came up with the information here given. From this survey he makes nine recommendations for improving the service

used on a part time basis to assist the full time workers.

BUILDING CUSTODIANS AND OTHER DUTIES

Seventeen of those replying to the questionnaire indicate that their building custodians do not perform any duties outside of their custodial work as opposed to five institutions whose custodians do other assignments. These outside duties consist of such things as running errands, caring for grounds, doing police duty, going after mail, doing emergency moving, delivering mail in buildings, delivering parcel post in buildings, delivering freight in buildings, moving furniture, moving books and refinishing floors.

METHOD OF APPOINTMENT

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Most of the schools reporting indicate that they appoint their building custodians as outlined in table 2.

Table 2-Method of Appointment

Method	No. of Cases
Civil service	4
Private interviews	21
Competitive examinations Personal references	

Some schools use two or more methods of making these appointments but 21 schools use the private interview as the chief means of appointing custodial personnel.

CUSTODIAL MANUAL

Five of the replies show that a custodial manual is available (three were sent in with the replies); 19 institutions show a lack of such material.

If reference is made to the total number of building custodians in all colleges and universities (see paragraph on number of custodians), it will be noted that only 21 per cent of the 99,860 building custodians, or 20,970, have a manual to guide them in their work; 79 per cent of the 99,860 custodians, or 78,890, are denied the help of a manual of instructions.

TRAINING PROGRAM

Seven of the colleges and universities state that they have a training program for building custodians; 16 state they do not, and one did not answer this question. Thus, only 30 per cent have a training program which means that of a total of 99,860

building custodians in all colleges and universities only 29,958 have the benefit of training programs while 69,902 custodians are denied this help.

WORK ASSIGNMENTS

Seventeen of the replies show that custodians are assigned work by buildings, that nine schools assign the custodial work by square feet of floor area, one by the number of rooms and one by squads.

The majority (71 per cent) of colleges assign custodial work by buildings because the buildings are fairly uniform in size on most campuses. By knowing the floor area and needs in each building, it is relatively easy to assign custodians on this basis.

AMOUNT OF FLOOR AREA ASSIGNED

The floor areas assigned each worker vary as shown in table 3.

Table 3—Amount of Floor Area
Assigned

Floor Area Range			90	No. of	Cases
0	to	10.000	sq.	ft	1
10,000	to	15,000	sq.	ft	4
15,000	to	20 000	59.	ft	4
		25,000	sq.	ft	1
		28,000			1

The amount varies considerably, taking into account other factors, such as type, use and age of the building, traffic conditions and the method of cleaning.

USE OF SPECIAL CREWS

The majority of colleges and universities favor the use of special crews (table 4).

Table 4-Use of Special Crews

-	•
Type of Work	No. of Cases
Washing windows	13
Washing walls	10

According to this table, most of the officials of these institutions recognize the need of having trained crews perform tasks that require experience and judgment in handling the special equipment needed to do a satisfactory job. This leaves the building custodian free to devote his time to cleaning activities of various types and kinds.

EDUCATIONAL REQUIREMENTS

The educational requirements for custodial workers are outlined in the following table.

Table 5-Educational Requirements

Amount of Education No. of	Case
Eighth grade graduate	9
High school graduate	3
Ability to read and write	3

The trend shown is to select custodians with at least an eighth grade education although some schools indicate that custodians should be able to read and write only.

AGE LIMITATIONS

Table 6 shows a tabulation of the answers received from colleges and universities concerning age limitations for new custodial workers.

Table 6-Age Limitations

-			
-	lge	Range	No. of Case
35	to	50	6
25	to	60	6
18	to	69	
Up	to	65	
Up	to	50	
Up	to	45	1

Owing to the scarcity of applicants in this field, it has been hard to adhere to definite rules as to age. In general, however, there is a tendency to require new employes to fall in the 25 to 50 year class so they will be old enough to be settled in their work as well as young enough to have a definite tenure before them after they have learned the requirements of their jobs.

PHYSICAL DISABILITIES

Ten colleges and universities hire custodial workers with some physical disabilities; 11 state they do not, and three give no answer to this question. These physical impairments are tabulated in table 7.

Table 7-Physical Disabilities

Impairment	No. of	Cases
Poor eyesight .	.000 .0000000000000040	2
Artificial limb		5
Poor hearing .		4
One arm		1
Slight physical	impairments	1

The general practice seems to be to use persons with slight physical impairments where they can be fitted into the program. In many instances they can be of real service if they are carefully selected and properly placed in their work assignments.

PHYSICAL EXAMINATIONS

Thirteen schools require new custodial workers to pass a physical examination before they can be employed but 11 schools do not. Six schools require custodians to take annual physical examinations; 18 do not.

This indicates that the trend is to employ persons who are physically fit to do their assigned tasks and then make periodic checks to see that they are able to continue in their jobs.

HOURS OF WORK

The distribution of hours worked each week is charted on table 8.

Table 8-Hours of Work

W	ork W	•	e	k											N	lo	of	Cases
44	hours											0					1	5
45	hours										9							1
48	hours																	5
	hours																	3

From this table it can be seen that the tendency is to set up for all custodial personnel a 44 hour week which is arranged for a 5½ day week, eight hours a day with a half day on Saturday.

SALARY RANGE

Twenty of the replies state that a salary schedule is now in effect; four failed to answer this question. Salaries range all the way from \$65 to \$312 a month but the average range is from \$120 to \$153 a month.

From the figures given, the salary may not be sufficient to attract persons who are willing to make this a lifetime vocation. Every effort is being made, however, to provide salaries comparable to those in other occupations requiring the same type of personnel.

AGE RANGE

There is a great variance in the range of age in the custodial personnel at colleges and universities. The age range of 18 per cent of the custodial force is from 50 to 55 while that of only 15 per cent is from below 25 to 35. Fifty-five per cent of all custodians are in the age group of 35 to 60; only 19 per cent are in the age groups from 60 on.

This indicates that the present force is in the middle age range and will have a relatively short tenure of employment before reaching the age of retirement. The 15 per cent group in the range from below 25 years of age to 35 is smaller than the older groups (19 per cent) in the range from 60 years of age and up which will soon reach the retirement age. At this rate, the force would reduce itself by 4 per cent annually unless younger applicants are attracted to this field.

VACATIONS AND SICK LEAVE

Twenty-two schools indicate that they give paid vacations to building custodians; one school does not, and one school failed to answer this question. The amount of vacation varies, as shown in table 9.

Table 9-Vacation Periods

Length of Paid	٧	a	C	a	ti	0	n							N	lo	. (of Cases
One week								*									3
Two weeks			0								0	0					14
Three weeks																	3
Twelve working																	1
Fourteen working																	1

From this record it would seem that most institutions favor a two week paid vacation for building custodians.

In a similar manner, 21 schools give building custodians sick leave privileges with pay; three do not. This varies as shown in table 10.

Table 10-Sick Leave Provisions

Amount of Sick Leave	1	N	la	. of	Cases
Five days a year					1
Ten days a year		0			5
Twelve days a year					5
Fifteen days a year					3
Up to six weeks a year					1

The general tendency seems to be to allow from 5 to 10 days of sick leave each year.

PROBATIONARY PERIOD FOR NEW WORKERS

Eighteen schools indicate that new custodial workers should have a probationary period, which varies as demonstrated in table 11.

Table II-Probationary Periods

Length of	Pro	bo	21	ic	n	O	ır	y	-	P	01	i	0	d			N	lo	0. 0	Case
Two week	3																			2
Three mor																				5
Six month	s																			10
Twelve me																				1

The usual practice seems to be to put new workers on a six months' probationary period before they are given a permanent status. This allows for proper adjustment of the individual to the job.

TRAINING

Practically all colleges and universities believe that building custodians should be trained for their jobs and indicate the means for such training (table 12).

Table 12-Training

Forms of Training	1	N	0.	of	Case
Formal classes	0				3
Short courses					7
"Pick up" method					6
Demonstrations					8
Visiting other buildings					5
Assignment to experienced men					2

Some of the institutions favor more than one method of training but most of them favor the use of "demonstrations" to train their workers in the various technics of the job.

NUMBER UNDER ONE SUPERVISOR

There appears to be some variance in determining the number of custodians that can be overseen by one supervisor as shown in table 13.

Table 13-Supervision of Custodians

Under	C	n	e	Si	u	PI	81	n	ri:	50	10	,						-	N	lo	. 1	of	Case
0-10																0							4
10-20																							7
20-30																							5
30-40				0										0	0		0			0			5

In some instances there may be too much supervision and in others there is definitely too little. Industry and commerce have found that, in general, one supervisor is needed for every seven to 15 workers.

Table 14—Reasons for Dismissal

Cause	Free	quency
Dishonesty	 	12
Drunkenness	 	11
Loziness	 	8
Inefficiency	 	8
Insubordination	 	8
Lack of dependability		8
Too much time away from job		7
Neglecting duties		6
Trouble making		3
Disloyalty		3
Lack of cooperation		3
Neglecting personal appearance.		3
Moral lapses		3 2
Failing to do duty		2
Disorderly conduct		2
Lack of intelligence		1
Not interested in work		i
Inability to learn job		1
Failing to get along with building	 000	
occupants		- 1
Poor health		i
Inability to meet people		i
		- 1
Too old to do assigned tasks		
Molesting departmental equipmen		
material		1
Discourtesy	 	1

Table 15-Duties

Name of Duty F	requer
Keeping restrooms clean	
Keeping floors polished and clean	
Keeping windows clean	
Cleaning buildings—interior	
Keeping furniture polished and clean.	7
Cleaning blackboards, chalk trays,	
erasers	
Keeping superiors informed of building	
conditions Opening and closing buildings	
Keeping drinking fountains clean	
Removing wastepaper	
Keeping light flatures cleaned	
Cleaning buildings—exterior entrances	4
Operating heating plant	3
Sweeping, cleaning, dusting assigned	
orea	
Upkeep of grounds on campus	
Checking and closing windows and doc	
Adjusting furniture	
Good personal appearance	2
Requesting building and equipment	
repairs	
Operating ventilating equipment	
Refuse disposal	
Fire protection	2
Reporting mechanical trouble	1
Reporting electrical trouble	1
Care of apparatus	1
Politeness to staff	1
Keeping regular hours	1
Repair of plumbing fixtures	1
Electrical maintenance	1
Remodeling buildings	1
Checking for emergency repairs	1
Filling dispensers (paper, soap)	
Keeping walks cleaned	
Maintaining equipment, supplies	1
Distributing mail	1
Cleaning hallways	1
Keeping janitor's closet neat	
Turning off lights	1
Cleaning glass	1
Careful use of utilities, supplies	
Special services to departments	1
Special set-ups for meetings	1
Special police and traffic duty	1
Turning in found articles	1
Replacing burned-out light bulbs	1
Coordinating work with class activities	i 1

CAUSES FOR DISMISSAL

Many reasons are given for dismissing custodial workers. These are listed in order of frequency (table 14).

From the answers given it is apparent that each institution has different reasons for dismissing personnel but, in general, the first eight reasons given are encountered by most supervisors in considering causes for dismissal. The percentage dismissed for inefficiency or inability to learn the job is low, showing that the method of selection has been quite satisfactory.

IMPORTANT DUTIES

Each of the 24 institutions answering the questionnaire suggested several basic duties for building custodians (table 15).

In general, colleges and universities desire their building custodians to perform the first five duties listed. The remaining vary from one section of the country to the other.

IMPROVING SERVICE

Most of the answers received include suggestions for improving custodial services at colleges and universities (table 16).

Table 16—Suggestions for Improving Service

Suggestion	No. of Cases
Training period showing	
methods and use of su	
Paying better salaries	
Maintaining efficient supe	ervision 4
Night crew for cleaning.	2
Demanding maximum per	rformance 2
Testing all materials befo	ore purchase 2
Employing younger men.	
Cooperation with occupa	
More labor saving device	
Regular monthly meeting	
Making comparisons of b	
Lower retirement age	
Installation of central vaca	uum cleaning
systems	
Covering floors with linele	oum 1
Definite assignment of wa	ork areas 1
Periodic physical examina	ations 1
Adequate storage space	for equipment 1
Adequate hot water	1
Cleaning venetian blinds	
Periodic progress reports	

A great number of institutions recognize that training is the most important requirement in improving their custodial programs, with the next most important suggestion being to raise the salary level to that of common laborers in any particular area. The next suggestion is to provide better supervision where it has proved to be inadequate.

CONCLUSIONS

The steps necessary for improvement of custodial services in colleges and universities can be summarized as follows:

- A complete training program for all building custodians to standardize practices and procedures.
- 4. The use of more mechanical devices for better economy.
- Cleaning operations by night crew.
 - 6. A custodial manual furnished.
- 8. Higher standards of efficiency to provide better service with more economy.
- 2. A better salary schedule to attract younger men.
- 3. A more efficient system of supervision.
- New buildings planned with adequate storage areas.
- Continued research to develop new materials, machines and practices that will provide better services with greater economy.

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TAXING FRATERNITY HOUSES

The cases cited here provide a legal weather vane. Its present direction has been set largely by adverse decisions, but—is there a new trend in the wind?

M. M. CHAMBERS

American Council on Education

THE QUESTION OF TAX EXEMPTION for college fraternity residences is perennially litigated, although only relatively few states allow the exemption and their number has slowly become smaller within a generation. There is a possibility, however, that the trend might be reversed if and when fraternity houses should come to be regarded as being in the same category as dormitories, that is, as housing for students provided and operated by the college or university as an essential part of its general educational function.

HOUSES ON CAMPUS TAXED

The two most recent decisions, both adverse to the fraternities, were concerned with houses located on land owned by the university. At Cornell, two fraternity houses on the campus were built under an agreement whereby the fraternities furnished the money and the university bound itself not to evict them without paying the market value of the houses. The fraternities also contracted to pay the taxes in the event any taxes should be assessed and collected.

The university was technically owner of the houses because the fraternities had no actual lien; but, nevertheless, the university's ownership was severely limited by the conditions of the contract so as to weaken somewhat the argument that the houses were within the statutory requirement of exclusive ownership and exclusive use for educational purposes.

The adverse decision, however, was based chiefly on the court's conclusion that their use was not exclusively educational. They are used, thought the court, for purposes distinctly "social" in a discriminatory sense, as well as educational, and their lodgers are chosen on a "social basis."

The opinion concludes: "We hold that these buildings are and are used as private fraternity houses, the same as fraternity houses owned by the respective fraternities, either on or off the campus, which are not exempt. Controlling is the fact that the buildings in question are not used exclusively for educational purposes, any more than a fraternity house off the campus." 1

In Georgia a similar result was reached in a slightly earlier decision, but by different reasoning and not without a substantial minority dissent. Here, the University of Georgia leased a part of the campus to the Sigma Nu Fraternity Home Association for one year with option of successive renewals to an aggregate of 99 years, for \$1 a year, obligating the fraternity group to build a house costing between \$20,000 and \$35,000, with no right to convey its interest except to sell to some other fraternity at the University of Georgia. At the termination of the lease the house would become the property of the regents of the University System of Georgia, which also agreed to provide 60 per cent of the cost of the house in the form of a 41/2 per cent loan, to be amortized in a period of twenty

Did this create the relationship of landlord and tenant between the university and the fraternity association, or did it give the latter an "estate for years" for the duration of which the property would be properly taxable against the fraternity? The majority

¹Cornell University v. Thorne, 184 Misc. 630, 57 N. Y. S. 2d 6 (1945).

of the court decided for the second alternative and held the property subject to levy and sale under tax execution.²

Two of the justices took a different view and recorded their dissent. They thought the fraternity group ought to be regarded as no more than a tenant because the 99 year lease was actually a succession of one year leases at option and because of the very limited right of conveyance. "There would be a public sale at which the public could not bid or buy." They thought, in fact, that the fraternity had no transferable interest in the land and believed the real purpose of the agreement was to make doubly sure that the land would remain in the ownership and control of the regents. The purely nominal rental, the requirement that a house be built and various stipulations regarding conformance with university regulations all lent color to this view.

IS A FRATERNITY CHARITABLE?

An earlier Georgia case turned on an entirely different question but was also decided against the fraternity. A corporation owning the Chi Omega sorority house at the University of Georgia sought an injunction to restrain the collection of taxes on the ground that its charter described it as "an institution of purely public charity" and stipulated that no private person may ever have any right or interest in its property, all of which must be used to advance education.

The court held the property taxable, remarking that the crucial test is the actual use of the property and not the words of the charter of the corporation owning it. Stressing the fact that members of the sorority paid sub-

²State et al. v. Davison, 198 Ga. 27, 31 S. E. 2d 225 (1944).

stantial fees for initiation and local and national dues, in addition to a standard price for room and board, one third of which went to the corporation as rentals, the opinion concluded: "We do not find that the corporation has provided a home for young women unable to pay board" and thus dismissed its claim to be regarded as a charitable institution.³

RULING IN SOUTH DAKOTA

In South Dakota a corporation composed of active and alumni members of Sigma Alpha Epsilon, owning the chapter house at the state university at Vermillion, sued for refund of taxes paid from 1925 to 1935 on the ground that it was a charitable organization and that the property was used for educational purposes. The corporation was created in 1911 as a stock corporation and acquired the chapter house and rented it to the active chapter at annual rentals varying from \$750 to \$2500 yearly.

Under these circumstances the corporation, entirely distinct from the active chapter of the fraternity, was held to be clearly not a charitable organization but merely a landlord exacting a full rental. Such landlord was not exempt under South Dakota statutes even prior to 1929 when only charitable use was necessary for exemption. Since that year both use and ownership have been required to be charitable. Therefore, the court did not trouble to decide the question of whether the use of the house was for educational purposes so as to come within the statutory meaning of The claim for exemp-"charitable." tion was denied without the necessity of any such determination.4

EXEMPTION AS LODGE

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Under the Oklahoma statute exempting property of fraternal orders or lodges, college fraternities are held to be within the exempted class. A series of Oklahoma decisions in 1936 was markedly liberal toward fraternities. Adopting and following its own decision of the point 11 years earlier, the court held them exempt under the statute exempting property owned and occupied by "fraternal orders or societies"; and a chapter house owned

by a nonprofit fraternal corporation for the use and benefit of the local chapter of the fraternity was within the exemption because "the real owners of the beneficial use and right of occupancy of the premises are here shown actually to occupy the same." The decisions also went farther and



unequivocally declared that the fraternity property involved was devoted solely to educational and charitable uses and was exempt from taxation also on that ground.⁵

The matter has had a stormy and variable recent history in New Jersey. A statute exempting lodges and fraternal orders was enacted in 1936 but an amendatory act of 1937 prohibited the exemption of college clubs and fraternities and suits brought by two fraternities soon thereafter were unsuccessful. But at length a third fraternity succeeded in having the statute of 1937 declared unconstitutional and void.

"The attempt (in the statute) is to impose a tax by a classification of ownership and not of use," said the court. "Property devoted to the same fraternal use but owned by fraternal organizations other than college fraternities or clubs remains exempt. We conclude, therefore, that the act violates the constitutional mandate that all laws for the taxation of property shall be general and is invalid."

This decision restored the exemption of college fraternity property.⁷ It was followed and approved in several companion cases brought by other fraternities at Rutgers University and all the judgments were subsequently affirmed by the court of errors and appeals in memorandum decisions.⁸

In a subsequent case which reached the state board of tax appeals in mid-1942, that tribunal declared: "All that is necessary, under the Alpha Rho case, is that there be literal compliance with the statute, i.e. that the property be devoted to the uses of a fraternal organization or lodge, any fraternal organization of whatever character, so long as no part of the property is used for profit. This being shown to be so in the present cases, each of these properties must be adjudged exempt for the years here under appeal."

The triumph was short-lived, however, for late in 1942 the entire statute of 1936 was declared unconstitutional and fraternity property is now subject to local taxation in New Jersey.¹⁰

UNANIMITY NOT REACHED

A glance backward over a decade thus discloses that the several states continue to exhibit variance not only as to their statutes regarding the taxation of fraternities but also as to the reasoning of their courts of last resort when contemplating the nature of fraternities and construing the statutes. In a minority of the states, fraternity houses are not taxed. Whether this minority will shrink or grow cannot be hastily concluded.

In the present new and somewhat hectic era for higher education in America, it is difficult to predict what modifications may take place regarding the character of college fraternities and the ownership and control of their housing. A well known tendency, long under way, is to bring them into closer relations with the institutional authorities, through both cooperative and regulatory measures, and to integrate their properties more thoroughly with the educational plant of the institution.

Phi Kappa Psi v. State, (Okla.), 53 P. 2d 1130 (1936); Phi Delta Theta v. State, (Okla.), 53 P. 2d 1129 (1936); State v. Oklahoma Beta of Pi Beta Phi Sorority, 55 P. 2d 133 (1936); State v. Alumnae of Tau Beta Chapter of Chi Omega Fraternity, 55 P. 2d 134 (1936).

Phi Zeta of Lambda Chi Alpha Frada (1936).

Phi Zeta of Lambda Chi Alpha Fraternity v. City of New Brunswick et al., 123 N. J. L. 237, 8 A. 2d 553 (1939), and Alumni Association of Delta Chapter of Zeta Psi Fraternity v. City of New Brunswick, 18 N. J. Misc. 131, 11 A. 2d 374 (1940).

Alpha Rho Alumni Association v. City of New Brunswick, (N. J. L.), 18 A. 2d 68 (1941).

⁸Mu Beta Chapter, Chi Omega House Corporation, v. Davison, 192 Ga. 124, 14 S. E. 2d 744 (1941).

South Dakota Sigma Chapter House Association v. Clay County, (S. D.), 276 N. W. 258 (1937).

^{*}Several fraternities against the City of New Brunswick, 127 N. J. L. 234, 233, 232, 231, 230, 21 A. 2d 732, 734, 737, 739 (1941).

^oAlumni Association of Delta Chapter of Zeta Psi Fraternity et al. v. City of New Brunswick, 20 N. J. Misc. 275, 26 A. 2d 556 (1942).

¹⁰Rutgers Chapter of Delta Upsilon Fraternity v. City of New Brunswick et al., 129 N. J. L. 238, 28 A. 2d 759 (1942); affirmed, same, 130 N. J. L. 216, 32 A. 2d 364 (1943).

STUDENT STORE CONVERTS TO Self Service

EARL WESLEY HOLDER

Student Store Manager; also Business Manager of Associated Students, Pasadena Junior College

AFTER ONE YEAR OF EXPERIMENTING with a serve yourself or booketeria type of store, Pasadena Junior College has converted its student store into a 100 per cent self service operation.

One of the primary problems solved by this innovation was that of help. With the self service system, the Pasadena store can serve 3000 students under normal conditions using only one full time cashier supplemented in rush periods by a student helper.

For a rush period, such as the opening of a new semester, two cashier lines are available. Approximately 125 customers per hour per line can be run through. In an extra heavy rush, temporary tables can be set up for cashiers and for lines which can exit by a service door.

With the arrangement of an island type of cashier stand, the cashier can serve such auxiliary counters as fountain pens and candy. Many small stationery items are located on an open display counter in the cashier's island as items of this type are more easily shoplifted. Pencils are kept in cabinets under the cashier's counter for prompt dispensing.

Items which could be stolen, such as expensive drawing instruments and slide rules, are kept under lock and key in a 6 foot fluorescent lighted glass case. Merchandise in this case is numbered and can be obtained from the cashier by stating the stock number.

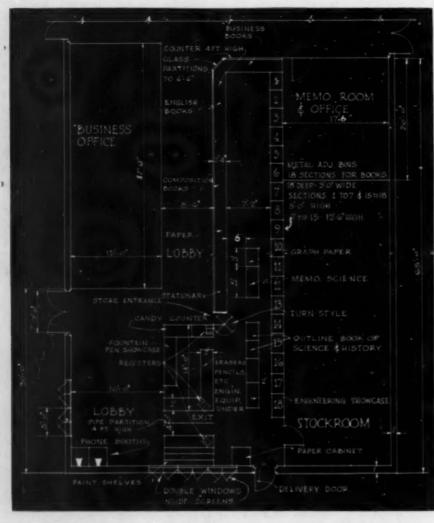
The retail method of inventory is used at Pasadena Junior College. All cash registers are full itemizing and adding type machines. Each register gives a nine department breakdown, thus giving the proper sales control by department. An itemized cash register receipt is given to each customer.

As a result of this system, it is possible for students to come in and peruse the material on the shelves and pick out many books and pamphlets which help them in their classes. A decided increase in supplementary book sales has been noted. Many books which were considered obsolete in various fields have found buyers under this system.

A survey of the sale of paper items shows that the students have been buying from four to six packages of filler paper rather than the customary one package. They have also been buying numerous other types of fillers, notebooks and supplies. Heretofore they did not know the stock contained in the store.

All customers are admitted to the store through a turnstile. A large sign designates this entrance and states that all books and supplies must be left outside while shopping, and a book rack is provided for this purpose. The turnstile may be used to keep too many people from entering the store during a rush period. It can be regulated so that persons are not allowed in the store until several of the customers have left and provide space for those waiting.

All books are located in sections by subjects according to the department in which they are taught. The book sections run from Nos. 1 through 15, starting with business education and ending with social science. All shelves



- . Secretarial
- Secretarial
- German
- Spanish and

- Shop Mathematics
- 10. Life Science
- Physical Sci. 12. Eco., Psy., Phil.
- 13. History
- 14. Home Eco., etc.
- 15. Memo of nursing
- 16. . . . language etc.
- 18. Geology maps



are labeled according to subject matter, such as physical science under which are chemistry, geology and physics. A cashier can readily advise a customer as to the section in which a particular book is located. The stationery section is lettered from A through H.

The secret in running a successful booketeria lies with the cashier. The stock room door remains locked at all times and only on special occasions is a cashier admitted to the room. When stock is needed, the cashier rings for additional assistance from the business office. Cashiers are instructed: Never leave the register.

All transactions in the store are on a cash basis. Books are paid for at the business office directly across the lobby. All interdepartment purchases

Above: Angle shot of student store showing general arrangement. Customers enter through a turnstile after depositing all their books and supplies on a rack outside. Right: Students make their own selections from shelves labeled as to subject matter. Many books once thought obsolete have been disposed of through the practice of admitting buyers to the open shelves. Below: Books are paid for at the business office directly across the lobby from the student store. Cashiers in the store are instructed never to leave their registers. When additional stock is needed, the cashier rings the business office.





which involve writing sales tickets are also handled in the business office.

The store is partitioned off with a 42 inch plywood base and 32 inch glass upper partition. All activities within the store can easily be seen by the workers in the business office.

During a rush period, in the conventional type of store, it is necessary to have several clerks, many inexperienced, to handle sales. In the self service store this condition does not prevail.

The serve yourself type of store not only meets the need of our present day problems but has unlimited possibilities. The students and faculty of Pasadena Junior College have shown their approval of this new system by their many favorable comments.



CONTINUING STUDY OF OPERATING PRACTICE

Periodically, College and University Business asks a selected group of readers about a specific operating technic or method and publishes the findings for the guidance of readers in measuring their own methods.

What About Food Costs?

Interpreted by MARY DEGARMO BRYAN

INCORPORATING THE REPLIES OF 75 college and university food services, which vary widely in size, type and location, this survey is of value because it may suggest trends and needs rather than because of any specific figures it discloses.

1. One trend is that of increasing charges to meet rising costs of food and labor, a trend unanimously viewed with regret and concern. Institutions are assuming a greater burden for the proper feeding of student populations. The great majority are evidently carrying this service on a nonprofit basis and wish to serve plenty of good food at minimum cost to students; hence the alarm at rising prices. Such comments as "G.I.'s and other students refuse to spend more than 15 cents for a meat portion" suggest that there is a definite limit to which prices may be raised.

One bright spot is reported in the picture in that the high costs of some items, such as meats, make it necessary to feature other foods which can be served frequently at reasonable cost. "Menus are more varied and show more imagination," "demand for raw foods is greater" and "milk and dairy products are very popular and students eat a heartier breakfast than formerly." One comment, however, states that "food served is being downgraded in spite of all that dietitians can do—lower quality, more starches, fewer delicacies, less meat."

2. The trend toward cafeteria service is definite. This seems to result largely from an effort to offset increasing costs by using a smaller number of employes, regular and student,

1.	What ty		food	service	are
	provided	?			

Cafeteria	 	46
Table Service		
Fixed menu	 	37
Choice menu	 	3
Fountain Service	 	16

2. Do you attempt to make food service financially self supporting?

Yes								*					*	×				*	64
No			0		0								0	0		0	0	0	2
No	An	W	74	N		0	0			0		9					0		5

3. What meals are served?

Breakfast.		4		0	2								٠				66
Lunch	0		0		0	0	0		0	0		0	0				68
Dinner			0			0						9					65
No Answer	0		0		a		0	0	2		4	0	0	۵	0	6	2

What is total number of meals served daily?

40% of enrollment of colleges reporting (projected to U. S. enrollment represents 2,500,000 meals daily)

5. How many students are fed in college operated dining halls?

800,000 (projected on basis of returns)

How many nonstudents (employes, faculty) do you feed daily?

100,000 (projected on basis of returns)

7. How are student meals paid for?

Board Basi	3.	0												0	0	0	3	8
Meal Chec	k.		0	0	0	9	0										1	6
Both						0			0	0		0				0	1	3
Cafeteri	0									9						a		5
Cafeteri																		
No Answer											-							A

8. If paid on a board basis, what fee?

194	45-46		
Average \$138.11, semester.	High \$300	Low \$69	Median \$120
98.18, quarter	102	60	100
25.86, month	40	19	22

	-0-4/		
Average	High	Low	Median
\$151.05, semester.	\$300	\$78	\$144
94.32, quarter	123	75	90
28.17, month	40	22	24
Per Cent of Chang	e Betw	een 19	45-47
Increased fees			55%
£			48

		1	P	e	r	(ı	ıŧ	4	1	F	In	ıc	r	e	a	10			
Average	0				0			0									0		3	9	14.1%
Median.																	a				14.5
						8	lo	13	is	į.	c	of		F	•	e					

					-		•			-			ъ.,	-	•								
Semester									۰								.0		0	۰	0		61%
Monthly.	0		0	0		0		9	0			0	0		0	0	0	0	u				31
Weekly.									9				0	0	0		0		0.				9
No Answ	81	۲.					0				0	4	0	0		0	0	0		0		0	21

If soda fountain or snack bar is operated, what is the annual dollar volume of this operation?

15 colleges	\$296,834
High	84,000
low	

In determining food service costs, what per cent is allowed for:

Raw food costs	57.5%
High	85.0
Low	35.0
Labor	27.9
High	50.0
low	10.0
Overhead and depreciation	7.3
Laundry	2.9
Supplementary supplies	

11. What was your per meal raw food cost during last 12 months?

Averag			0		0							\$0.25
High												
Low					0							0.11

12. What do you expect your raw food cost per meal to be during coming 12 months?

Average			9										\$0.28
High				6	0			6	0				0.52
Low													0.14

13. What is your estimate of total raw food cost for next 12 months?

\$126,000,000 (projected on basis of returns)

and by avoiding waste through offering a choice within the menu.

The trend toward enlargement and reequipment of dining services is held up at the moment by "high building costs" and "inability to obtain much needed equipment."

Certain needs are reflected also by the survey.

1. The range in all figures reported is wide. For example, amounts spent for raw food vary from 35 to 85 per cent; for labor, from 10 to 50 per cent. This indicates, first, a need for a uni-

form basis of food cost accounting so that similar institutions in the same geographical area may have a real basis on which to compare operating costs and to set up sound operating procedures.

Such system should be an invaluable daily aid to good management in these times of rising food prices and would seem to be greatly needed since 45 of the 75 replies state the institutions were not able to give their average raw food per meal during the last year.

2. The range suggests also the de-

sirability of pooling information on labor costs and labor policies, including student labor, within a geographical area. Such information should serve as a basis for cooperation in developing forward looking policies which would ensure better help and good service. There were many comments to the effect that lack of adequate numbers of capable employes, generally decreasing standards and poorer supervision are causing the loss of important opportunities for social training in the dining halls.



FOOD COSTS HIGH

E. B. COOK

Supervisor of Dormitories and Dining Halls University of Georgia

WITH RECENT RELEASE OF PRICE controls on practically all food items and also of wage controls, college dining hall operations are still struggling along under a ceiling that is probably of more active concern than any of the former government controls, namely, the ceiling of low cost dining fees.

It has long been the practice to encourage more students to attend college by offering low cost lodging and dining facilities. The standard menu for the college student is a substantial and balanced quantity of inexpensive food.

How can college dining halls maintain their program in the face of currently high food costs, wage costs and failure of standard sources of supply? Food costs, according to published reports, have increased 70 per cent over prewar levels and this measure of increase does not take into consideration the new higher prices since controls were lifted. Wages are higher than prewar levels; of even more concern is the short supply of skilled employes and the nonchalant attitude of unskilled employes. As for sources of supply, the meat packers have offered less than 25 per cent of the meat requirements to college dining halls; wholesale grocers have been "out" of complete variety of canned goods, dairy products, rice and sugar.

College dining halls, on the other hand, are serving greater numbers than ever before and have not increased fees to anything like the proportionate increases in costs of supplies and services. Dietitians would never have believed that they could "season" food with so little fats, that they prepare for so many with less effort or that they could "get by" as they have.

One or two good reasons why the college dining halls are "getting by" is that the majority of college plants over the nation were converted into war training centers and were speeded up to meet the demands of war preparation. Experts chosen from the ranks of prewar professions specialized on every operation in mass food service, making the necessary adjustments in the colleges to take care of abnormal demands. Additional equipment was added to step up the production load and serving equipment was specially designed to speed up individual service and to minimize serving and eating time. Then an all-out conservation program was inaugurated to encourage short cuts in work and reduction of food wastes and to ensure sanitation.

A few practices inaugurated and developed to carry out the war program may be listed as follows:

1. Planning menus in advance for long periods (thirty days).

- Standardizing recipes and calculating specific measurements of ingredients for large quantity preparation.
- Purchasing directly to specifications of menus, thus eliminating carrying surplus stores and unneeded items.
- Planning work schedules so as to process raw foods quickly.
- Redesigning service dishes to minimize number of pieces used.
- Serving properly and attractively (hot foods hot and cold foods cold).
- 7. Promoting the slogan, "Take all you want but eat all you take."
- 8. Cleaning up utensils immediately after they are used.
- Drawing up organizational regulations to perfect sanitary standards.

Though it is our common desire to forget about army regimentation, we have, nevertheless, learned much from the operations of a "serviceman's mess hall" to aid us in meeting the demands of an overcrowded student population. The college dining hall of the immediate future will not resort to the prewar "family style" of service; however it will adhere to the practice of quantity preparation and service.

There is much to be done in the way of planning and practice to develop an ideal dining program but not until prices, wages and sources of supply become more stable will anyone approach that ideal.

QUESTIONS AND ANSWERS

Selecting Student Adviser

Question: Our college is interested in creating the post of "student adviser." Should this person be a member of our present administrative or academic staff? What are some desirable qualifications for the person holding this position?—T.W.H., Ariz.

ANSWER: I feel that a student adviser should be a member of the college administrative or academic staff. Desirable qualifications for the person holding this position are (1) a normal outlook on life, (2) a genuine liking for the work and for young people, (3) an objectivity of attitude, (4) ability to interpret test scores, (5) ability to judge probable deficiencies of the student, (6) power to persuade the student that he (the student) wants to overcome these deficiencies and (7) accurate knowledge of degree requirements.—ROWLAND HAYNES.

To Obtain Surplus Textbooks

Question: We are anxious to obtain surplus textbooks. How do we go about it?— T.W., III.

ANSWER: Surplus books are distributed by the Surplus Book Division, Library of Congress, Washington 25, D. C.

Lists of available books have been sent out; if your business manager has not received them, inquire at the Library of Congress.

Books are sent postpaid for distribution to veterans only. The Veterans Administration compensates the school at the rate of 25 cents a book when the school gives evidence, which includes the signature of the veteran, that it has distributed the books.

The texts become the property of the veteran with the same limitations that apply to other books and supplies.—RUSSELL REYNOLDS.

Water Supply for Colleges

Question: Would you recommend that a college have its own source of water supply or should it purchase water from municipal facilities?—O.H.P., Ala.

ANSWER: Generally speaking, if a good municipal supply is available at

a reasonable price, it is better to use such a supply. There are at least three reasons for my opinion and they are as follows:

 A municipal supply is constantly checked for purity, thus relieving the institution of this important responsibility.

A municipal utility, presumably, has sufficient standby units to ensure a sufficient supply of water to meet the demand at all times.

3. A university owned source would have to be in duplicate to ensure a reasonably sufficient supply, thereby necessitating a costly double capital outlay.

Of course, in a small town where the municipal supply is not wholly reliable, the situation might warrant a university owned source which could be cross connected to a municipal source to ensure an adequate supply.

—A. F. GALLISTEL.

Who Purchases Food?

Question: In setting up our food service department, we have assigned food purchasing to the dietitian. Is this the general trend, or should the purchasing agent handle these responsibilities?—A.L.D., N. J.

ANSWER: The answer to the foregoing question could be given by the word yes since that is the general trend. I should like to elaborate a bit, however, saying that, regardless of the trend, the person responsible for the purchasing of food should be the same person who is in charge of the preparation and serving of food. Such a person can be the steward, the dietitian or even the chef.

In other words, this person must be familiar with all operations regarding the preparation and serving of food and should know the likes and dislikes of the customers to be served. Such a person can do a far better job when it comes to the purchasing of raw foodstuffs than a purchasing agent who, in all probabilities, never sees the merchandise ordered and has to rely entirely on the requisitions and reports of the dining hall manager.—Andrew VITALL.

Starting School Laundry

Question: When does it become economical for a college or university to consider operation of its own laundry?—R.E.J., Tex.

Answer: In my opinion it becomes economical for a university to consider operation of its own laundry when a large hospital and many large dormitories are part of the general operation.

Owing to the volume of business at the University of Michigan and to the fact that we are exempt from certain taxes, our costs are materially lower than prices which could be quoted by local laundries. We have 125 employes and handle, during the year, approximately 4,185,000 pounds of flat work for the hospital and 1,800,000 pieces of flatwork for our dormitories. These figures represent about 80 per cent of our gross business, the balance being finished starched pieces.—D. A. CALLNIN.

Campus Bookstores

Question: Is it advisable to permit students to operate their own bookstore on the campus?—M.H.M., Ga.

ANSWER: Personally, without speaking for the administration of the university, I am opposed to the idea of government and governmental agencies going into business in competition with commercial firms. There are circumstances, however, that would necessitate the installation of bookstores on the campus quite frequently. Such is the case on the University of Kansas campus at this time.

The students and faculty have found the present commercial stores incapable of furnishing a satisfactory service; therefore, our state board of regents has approved the plan whereby the university is establishing a student cooperative bookstore.

As is frequently true, the operation of campus bookstores leads to the selling of other commodities, such as costume jewelry, shirts and neckties, but the board of regents provides that only books and laboratory supplies may be sold through the bookstore.—KARL KLOOZ.

THE ROVING REPORTER

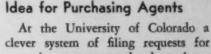
"Merry Christmas"

An excellent awareness of public relations was demonstrated by the Christmas and New Year's greeting card mailed by President and Mrs. G. W. Diemer of Central Missouri State Teachers College, Warrensburg,

The college is in the midst of an alumni campaign to raise funds for

International Amity

An unusual example of international ecclesiastic and academic amity was presented at Ripon College recently when the institution accepted a copy of the mace used ceremonially in Ripon Cathedral in England. The mace, a symbol of authority, is a large piece of solid ebony surmounted with a Celtic cross of sterling silver bearsul general in New York City, representing his government which permitted a piece of stone to be taken from the original fabric of the cathedral, erected about A.D. 900, to be used as an inset in the mace.



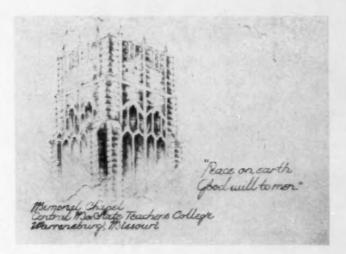
quotations on contemplated purchases has been developed by Leslie E. Rob-

bins, purchasing agent.

On the outside of the file folder in which the quotations for the specific purchase are to be filed, Mr. Robbins has had a printed form reproduced to give him an immediate indication of the exact status of the negotiation. This makes it unnecessary for him to leaf through all the correspondence and data enclosed in the file folder.

In the first column the name of the bidder is indicated and in the second column the date his bid was received. The third column indicates the price quoted and the fourth column indicates which firm was the successful bidder. In the last two columns are indicated the dates when the bidders are notified-through mail notice "A" to the successful bidder, through mail notice "B" to those firms whose bids were not accepted.

Mr. Robbins reports that this system is a great time-saver in studying bids and eliminates the necessity of time-consuming study of a heterogeneous collection of bids and data.



a memorial chapel to honor the sacrifices made by its students in uniform during World War II. The Christmas card carries an artist's sketch of the memorial chapel tower on its cover and an appropriate Christmas message is enclosed.

Fellow Students in Holland

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Biology students in Holland have been without classroom supplies since the war. Now, however, their stocks are being replenished through the generosity of American college stu-

At Russell Sage College, majors in biology are sending packages containing classroom materials to fellow students in Holland. The boxes contain forceps, slide rules, rubber rubing, absorbent cotton, razor blades as well as such standard school supplies as paper, erasers, chalk, glue and notebooks.

ing on the obverse side the seal of Ripon Cathedral, on the reverse that of Ripon College.

The mace was presented by the Rev. Canon Edward West, sacrist of the Cathedral of St. John the Divine, New York City, representing the bishop of Ripon Cathedral.

The presentation address was delivered by Francis Evans, British con-

QUOTATION SENT TO	RECEIVED FROM	316		ORDERED FROM	MAIL "A"	NOTICE "B"
JOHN JOHES Co.	10/23/4	623	15	-	-11	11/7/46
R. T. KENDALL INC.	11/2/46	546	50	-	11/5/46	11/7/46
S. M. MITCHELL Co.	10/15/46	583	10			11/7/46
1						
			-			
			-			

NEWS

Evening College Students Up 60%... Enrollment of Women at New High Speakers Warn of Federal Control... Czech Colleges Move to America North Carolina Plans University of Sea... Rochester Gets Cyclotron

Evening College Enrollments Increase 60 Per Cent

An estimated 300,000 students are now enrolled in evening colleges throughout the country, according to an announcement made recently at the annual convention of the Association of University Evening Colleges. This represents an increase of 60 per cent over the enrollment of last fall, officials of the association declared.

"For the next three or four years almost every evening school in the country will face the problem of accommodating large numbers of qualified students who will not find room in day colleges," Dr. Rollin B. Posey, secretary-treasurer of the association and dean of University College at Northwestern University, reported. He explained that part of the problem would be that of veterans who would have to find daytime jobs because of inability to live on the allowances granted by the G.I. Bill of Rights.

N. Y. U. to Pay Cost-of-Living Bonus

A supplementary payment of \$400 as a cost-of-living consideration will be made to all full time members of the teaching and administrative staffs of New York University, according to an announcement by Chancellor Harry Woodburn Chase. Payment will be made on January 1.

This emergency bonus, the second in two years, will be awarded to university employes who have been in active service since September 1 of this year. Supplementary compensation of varying amounts, based on length of service, has also been approved for members of the clerical, laboratory and plant staffs in con-

tinuous employment from September 1, 1945, until time of payment.

It is estimated that this special disbursement will cost the university close to \$600,000.

University of the Sea Planned in North Carolina

The nation's first University of the Sea, serving both marine scientists and wind burned commercial fishermen, may materialize at Morehead City, N. C., if plans now being laid come to fruition. The university would involve the Department of Conservation and Development, the University of North Carolina, State College and the General Education Board.

It would establish facilities and staff for research on the marine resources of the North Carolina seaboard, a marine museum and vocational training for commercial fishermen. Property at the former navy section base at Morehead City, including 27 buildings termed "ideal" for such an enterprise, already has been acquired by the Department of Conservation and Development. Actual operation of the laboratories and school is anticipated in 1947.

Navy Exam for Free Education Set for Jan. 18

The navy has set January 18 as the date for its competitive examination for choosing 5000 high school seniors who will be offered a free college education, plus \$50 a month. This is a part of the navy's expanded officers training program.

The examination date will be known as "X Day" in the navy and the exams will be held in 555 towns and cities throughout the country.

Enrollment of Women Reaches New High

Statistics released recently by the U. S. Office of Education indicate that enrollment of women in the nation's colleges and universities has reached a new high of 667,000. Because of the great number of war veterans now registered, however, the proportion of women students in the total enrollment is only about half what it was last year.

Dr. Francis G. Cornell, chief of statistics for the U. S. Office of Education, said that the 1749 colleges and universities had 2,062,000 students as of October 15, which was 50 per cent higher than the last previous record of 1,360,000, reported in 1939-40. This total included men and women.

Amherst Seeks \$2,000,000 for Salaries, New Curriculum

Amherst College will launch a campaign to raise \$2,000,000 in the next nine months for teachers' salaries and for the new curriculum which will be put into effect next fall, according to Dr. Charles W. Cole, new president.

President Cole, in addressing the alumni council, declared that the fund, which is to be known as the Second Century Fund, is necessary if Amherst is to remain a small college. "Quality, not quantity, must be the goal," he said, adding that the success of the liberal arts college depends upon the quality of its teaching and that Amherst's reputation has been built upon the greatness of its teachers.

Fifteen new teachers will be needed under the new curriculum plan which will emphasize individual instruction, small discussion groups and laboratory work for nonscientific courses.

Construction to Start on Memorial Building at Western Reserve

Construction will start at once on the \$95,000 Karl E. Davis Memorial Building on the campus of Western Reserve University, President Winfred G. Leutner of Reserve has announced.

The building, to be used for a veterans' dormitory and to provide additional locker and shower space for the Adelbert College gymnasium, is expected to be ready for occupancy February 11. It is named after the former Western Reserve athletic director and secretary of the Adelbert College Alumni Association who died on April 15 of this year. Davis had been athletic director for more than twenty years.

The building will cost \$80,000 and the equipment an estimated \$15,000. Approximately \$17,000 of the total has been raised by the Adelbert alumni.

The structure, to be adjacent to the present gymnasium, is designed to house 73 World War II student veterans attending Adelbert College. It will be three stories high with the ground floor extending below the surface level. It will be of fire resistant, concrete block construction, faced with brick, and will cover an area 50 feet wide and 86 feet 6 inches long.

Hobart, William Smith to Triple Athletic Field

Expansion of athletic fields at Hobart and William Smith colleges to three times their present size has been adopted as its fund project for the year by the Hobart Alumni Council, William E. Lytle, council president, announced in November. Work on the new athletic field is already in progress, with bulldozers, earth movers and other equipment leveling the expanse of land north of Boswell Field.

The new playing field area will include two full sized practice fields for football and lacrosse, one of which will be available to William Smith students for field hockey, archery and other outdoor sports; two softball diamonds, and a new baseball diamond.

Although not part of the present project, the Hobart Alumni Association will cooperate with the development fund of the colleges to seek a donor or donors for a new concrete

and steel stadium to seat 2500 and to be erected on the west side of Boswell Field. The new stadium will have the customary lockers, team rooms, showers, public toilet and other facilities on the ground floor of the structure.

Northeastern Nearing \$1,000,000 Goal

Presentation of \$100,000 by Godfrey L. Cabot to Northeastern University, Boston, for its student center fund has raised the total of the gifts made to the university to \$900,636 and virtually assures it of reaching its \$1,000,000 goal, university authorities have announced. Mr. Cabot, a prominent manufacturer since 1887, is a member of the university corporation and of the board of trustees.

The new building, expected to be completed next summer, will house a \$300,000 auditorium, a university commons, a lounge room, a chapel and an activities room.

Disclosure of several other gifts was made by university President Ell. Harry H. Kerr of Qunicy, president of the Boston Gear Works, has contributed \$50,000. Another gift of \$40,000 was provided by the estate of the late Eugenie Stafford Brown of Newton, Mass. James L. Richards of Newton, for whom Richards Hall at Northeastern was named, has given \$30,000 for the student center. Members of the university corporation have given \$350,114 in all for the structure, Dr. Ell said.

Pennsylvania Increases Salaries

An increase in salaries which adds approximately \$375,000 to the University of Pennsylvania's annual pay roll was announced recently by President George W. McClelland.

An addition of \$500 is being made to annual base salary rate of each full time member of the faculty or administrative staff who had completed at least one year's service by February 1 this year and who, by that date, had not received an adjustment equal to that amount in his salary since July 1, 1945.

Under the same conditions a 10 per cent increase is being made to the annual base salaries of all other full time employes not now under union contract. Other nonunion employes will get a 10 per cent raise as soon as they have completed a year's service.

World's Second Largest Atom Smasher to Be Built at Rochester

A super cyclotron, or atom smasher, that will produce particles of more than 200,000,000 volts, five times the maximum energy of any cyclotron now operating, will be built at the University of Rochester under a large program over the next few years to be financed principally by the U. S. Navy Office of Research and Invention for fundamental nuclear research.

The navy has made a large initial contribution to the project and the university will absorb a certain proportion of the costs and provide two new buildings at its River campus, one to house the huge atom smasher and the other, adjacent to it, for control rooms, shops, laboratories and offices.

The cyclotron will be the property of the navy but its construction and operation for basic research will be under direction of the University of Rochester's physics department headed by Dr. George B. Collins, recently appointed to succeed Dr. Lee A. Du-Bridge who has been chosen as president of California Institute of Technology.

It will take from eighteen months to two years to complete the cyclotron, which will be the second largest in the world and will be used to accelerate protons up to energies of more than 200,000,000 volts. The largest atom smasher is under construction at the University of California and uses deuterons instead of protons.

To Study Free Market Economy at Chicago

An effort to determine the conditions of a free market economy in the United States will be made in a three year study at the University of Chicago through a grant of \$100,000 from the William Volker Charities Fund of Kansas City, Ernest C. Colwell, president of the university, announced recently.

The study, conducted under the auspices of the law school, is under the direction of Aaron Director, former member of the University of Chicago economics department and more recently of the U. S. Department of Commerce. An executive committee of members of the university faculty will have general responsibility for the character of the study.

Changes Brought on by Enrollment Pressure Seen as Permanent

Speaking before the recent annual conference of the Association of Urban Universities, Dr. George F. Zook, president of the American Council on Education, predicted that the many changes which have come about in higher education because of the pressure of veteran enrollment will be permanently retained.

He predicted "some kind" of federal aid for individual students at colleges and universities in the years ahead and stated that "veteran education is also going to compel us to expand our concept of what post-high school education is or should be."

According to Dr. Zook, veterans have already forced "a permanent change in the evaluation of student achievement and competence." The men have requested college credit for "what they are, for what they know and for what they can do," rather than for time spent in formal classroom study.

Federal Aid Said to Be Threat to Independence

The availability of federal funds for education constitutes a threat to the independence of higher education, stated Dr. Alan Valentine, president of the University of Rochester, in a recent report to the board of trustees of the university.

Many of the forces behind that danger have been well meaning and even temporarily helpful, he said, but, whatever the motives, the results tend to be inferior education, educational policies which are questionable because they are beyond the capacity of the institution and permanent abandonment of a sound liberal arts tradition.

"Research is directed by government even before government presents a contract, because the known availability of government subsidies for research in certain special areas in itself directs scientists and their universities into those particular areas.

"Veterans in some cases are being rendered a disservice because many colleges are unable to resist the golden opportunity to strengthen weakened finances by admitting more veterans than they can properly instruct."



President David D. Henry of Wayne University is the retiring president of the Association of Urban Universities and Chancellor R. H. Fitzgerald of University of Pittsburgh is the new president.

Florida Women's College Admits Male Students

Another institution, the Florida State College for Women, has joined those women's colleges across the nation which have opened their doors to male students this fall.

A branch of the University of Florida was set up at a deactivated air base two miles from the college for women. The men will receive their credits through the University of Florida but will attend classes under F.S.C.W. instructors. Under this arrangement, 507 men and 2588 women have been registered.

Illinois to Raise Salaries

Increases in the salaries of the faculty of the University of Illinois have been approved by President George Stoddard and the board of trustees and are included in the budget request for the 1947-48 period being submitted to the legislature.

According to Lloyd Morey, comptroller of the university, the sum of \$5,552,772 has been allotted for increases in salary.

Named Brandeis University

The Albert Einstein Foundation, Inc., by unanimous vote of its board of directors, has named the university it proposes to open a year from now Brandeis University after the late justice, Louis D. Brandeis.

Conant Warns Eastern Association Against Government Intervention

Federal subsidizing of research in colleges and universities represents a real threat to the future of higher education, according to Dr. James B. Conant, president of Harvard, in an address before delegates at the twenty-seventh annual meeting of the Eastern Association of College and University Business Officers at the Hotel Statler in Boston, December 1 to 3.

Dr. Conant warned that bringing federal financing into both the research and academic aspects of university operation presented educational institutions with entirely new problems. Colleges must be watchful for excessive government intervention in their affairs, he warned.

Another highlight of the business officers' meeting was the exposition of Circular 268 released by the Veterans Administration which amends the procedures for payment to educational institutions for veterans' education. It was presented by Nelson Henson of V. A.

A study of social security provisions for university employes was presented by H. C. Gregg, business manager of Syracuse University. It revealed a wide variety of practice.

New officers elected are: president, and R. C. Magrath, University of New Hampshire; vice president, George E. Van Dyke, Syracuse University; secretary-treasurer, Boardman Bump, Mount Holyoke College.

The executive committee consists of Samuel F. Agnew, Western Reserve University; Morris Cochran, Brown University; J. G. Vann, North Carolina State College; Don C. Wheaton, Sweet Briar College, and Ervin T. Brown, Rollins College.

Pennsylvania Shares in \$100,000 Estate

The University of Pennsylvania is the recipient of most of the \$100,000 estate of Ella E. Ames, sister of the late Herman V. Ames, dean of the graduate school.

The will of Miss Ames provides \$12,000 outright for a graduate fellowship or scholarship in memory of her brother. The residuary estate reverts to the university, will be known as the Herman V. Ames Fund and will be used for the purchase of books.

Two Czech Colleges Coming to U. S.

As the result of negotiations with the State Department, teachers and students of two rabbinical colleges in Czechoslovakia who survived the Nazi invasion will be transferred to the United States, it was announced recently.

Under the agreement between the State Department and the refugee-immigration division of the Agudath Israel Youth Council of America, the two institutions will be moved intact to American soil. They are the College of Neitra, with 71 students and five professors, and the College of Sederheler, with 46 students and four professors.

Those coming to the United States represent only a small fraction of the enrollments of the two colleges. Many students were killed while fighting with Czech partisans.

Rockford and Beloit Honor Their Founders

Rockford College and Beloit College honored their founders at a joint dedicatory service in the Old Stone Church at Rockton, Ill., midway between Beloit, Wis., and Rockford, Ill., in November. Both colleges were founded by the same Congregational and Presbyterian clergy and laymen.

The faculty and trustees of both colleges with representatives of the student bodies and alumni participated in an afternoon service which was a part of Rockford's centennial observance. President Mary Ashby Cheek of Rockford and President Carey Croneis of Beloit presided at the ceremony.

University of Alaska Has Housing Shortage, Too

Officials of the University of Alaska recently reported that a large part of their fall enrollment consists of veterans who have moved north to escape the congestion of American universities.

Of the 337 students registered this fall, 201 are veterans. More than half of the students, representing 29 states, have moved from the United States to enroll at the Alaskan institution. The University of Alaska reports a housing shortage, however, and is utilizing war surplus Quonset huts as shelters for its students.

Names in the News



Dr. Lee Alvin DuBridge, formerly of the University of Rochester, has been inaugurated as president of California Institute of Technology to

succeed Robert A. Millikan who is serving as chairman of the executive committee of the institution.

Patrick Summerour has been appointed treasurer and business manager of the University of Georgia Savannah Division. After service during World War II and until his appointment to his university position, Mr. Summerour was employed by the Veterans Administration as branch supply officer for the Seattle area.

James T. Dunn has been appointed assistant business manager and director of plant operations for the University of Georgia Savannah Division, according to a recent announcement. During the war he served as a demolition expert in the army and received several decorations for gallantry in action and for being wounded in combat.

Dr. Francis Trow Spaulding was inaugurated recently as New York State Commissioner of Education and as president of the University of the State of New York. During World War II, he was appointed chief of the education branch of the War Department's information and education division.

Sidonia H. Ellis, formerly purchasing agent of Mount Holyoke College, has resigned her position to become Mrs. Charles G. Blumenauer. She and her husband will reside in New York City. For ten years the former Miss Ellis had served as college bookstore manager and, since June 1945, as purchasing agent.

Cyril E. Elsdon has recently been appointed business administrator of Adelphi College. He was formerly associated with the board of education in Pittsburgh.

Curtis H. Moore Jr., formerly veterans counselor at Michigan State College, has been appointed counselor of men and director of guidance at Adelphi College.

Henry Chauncey of Princeton, N. J., has been elected director and treasurer of the College Entrance Examination Board to succeed Prof. George W. Mullins of Barnard College, Columbia University, according to an announcement by Prof. Edward S. Noyes of Yale University, chairman of the board. Mr. Chauncey, formerly assistant to the dean of the faculty at Harvard College, has been acting assistant secretary of the board since April 1946.

Dr. Arthur H. Compton, chancellor of Washington University; Carter Davidson, president of Union College, and Edwin B. Fred, president of the University of Wisconsin, have been elected to the board of trustees of the Carnegie Foundation for the Advancement of Teaching.



J. Hugh Jackson, dean of the graduate school of business, Stanford University, has been elected a trustee of Teachers Insurance and Annuity

Association of America. Dr. Jackson served as comptroller and business manager at Stanford from 1937 to 1940.

Robert E. Burns, registrar and assistant to the president, has been appointed to succeed Tully Cleon Knoles as president of the College of the Pacific. Dr. Knoles has been selected for the newly created post of chancellor by the board of trustees.

Frederic O. Glover has been appointed successor to Oren Stephens as director of information for Stanford University. Mr. Glover has been editor of the Burlingame Advance, Burlingame, Calif. Mr. Stephens resigned his university post to become San Francisco representative for Newsweek magazine.

Harry A. Cody Jr. has been named executive secretary of Ripon College, in which position he will supervise public relations; activities and centennial observances planned for 1951.

William J. English has been appointed business manager of the new undergraduate division of the University of Illinois located at Mayo General Hospital, Galesburg. He has been on military leave.

DIRECTORY OF ASSOCIATIONS

Associations of College and University Business Officers

Central Association

President: C. D. Simmons, University of Texas; vice president: Herbert Watkins, University of Michigan; secretary-treasurer; T. E. Blackwell, Washington University.

Executive Committee: A. W. Peterson, University of Wisconsin; Lawrence R. Lunden, University of Minnesota; H. H. Brooks, DePauw University; William B. Harrell, University of Chicago.

Eastern Association

President: R. C. Magrath, University of New Hampshire; vice president: George E. Van Dyke, Syracuse University; secretary-treasurer: Boardman Bump, Mount Holyoke

Executive Committee: Samuel F. Agnew, Western Reserve University; Morr's Cochran, Brown University; J. G. Vann, North Carolina State College; Don C. Wheaton, Sweet Brian College; Ervin T. Brown, Rollins College.

Southern Association

President: W. Wilson Noyes, University President: W. Wilson Noyes, University System of Georgie; first vice president: George R. Kavanaugh, Berea College; second vice president: W. T. Ingram, Alabama Polytechnic Institute; third vice president: Howard MacGregor, Agnes Scott College; secretary-treasurer: Gerald D. Henderson, Vanderbilt University.

Executive Committee: Jamie Anthony, Georgia School of Technology; E. H. Fisher, Southeastern College; J. B. Paysinger, Columbia College; James F. Blair, Union College; C. B. Markham, Duke University.

University.

Convention: April 18-19, Gulf Park College, Gulfport, Miss.

Western Association

President: J. Orville Lindstrom, University of Oregon; vice president: William Norton, University of California; secretary-treasurer: K. B. Sauls, Brigham Young Uni-

Executive Committee: O. D. Garrison, University of Idaho, Southern Branch; Nelson A. Wahlstrom, University of Washington; Robert D. Fisher, University of Southern California.

Association of Business Officers in Negro Colleges

President: G. Leon Netterville Jr., Southern University; vice president: Islah Creswell, Fisk University; secretary: V. D. Johnston, Howard University; treesurer: Mark Birchette, Dillard University.

Executive Committee: Don A. Davis, Hampton Institute; Viola Means, South Carolina State College; L. H. Foster Sr., Virginia State College; W. A. Morgan, Bishop College.

Educational Buyers Association

President: James J. Ritterskamp Jr., Washington University; vice president; Gerald D. Henderson, Vanderbilt University;

vice president: Charles Hoff, University of Omaha; vice president: H. B. Bentsen, George Williams College; treasurer: Ed-ward K. Taylor, Cornell University Medical College; executive secretary: Bert C. Ahrens.

Convention: May 1-3, Omaha, Neb.

Association of Superintendents of Buildings and Grounds of Universities and Colleges

President: L. F. Seaton, University of Nebraska; vice president: Paul H. Elleman,

Nebraska; vice president: Paul H. Elleman, Ohio State University; secretary-treasurer: A. F. Gallistel, University of Wisconsin. Executive Committee: L. F. Seaton, University of Nebraska; Paul H. Elleman, Ohio State University; A. F. Gallistel, University of Wisconsin; Henry E. Pearson, Indiana University; John J. Colgate, University of Panasylvania Pennsylvania.

Convention: May 12-14, Ohio State University, Columbus.

Association of College Unions

President: D. R. Matthews, University of Florida; vice president: Douglas O. Woodruff, University of Utah; secretary-treasurer; Edgar Whiting, Cornell University; editor: Porter Butts, University of Wirconsin.

Convention: April 10-12, Illinois Union, University of Illinois, Urbane.

American College Public Relations Association

President: Herold K. Schellenger, Ohio State University; vice presidents: research, E. Ross Bartley, Indiana University; membership, W. Henry Johnston, Colgate University; regions, Horace Renegar, Tulane University; radio, Elmer G. Sulzer, University; radio, Elmer G. Sulzer, University; radio, Elmer G. William H. sity of Kentucky; athletics, William H. Wranek, University of Virginia; secretary-treasurer: Max E. Hannum, Franklin and Marshall.

Publications: editor, Lorena Drummond, Southern Illinois Normal University; associate editor, Paul Faris, Hendrix College; business manager, Roy K. Wilson, National Education Association

Convention: May 14-17, Coronado Hotel, St. Louis.

National Association of College Stores

President: Norman M. Gay, Boston University Book Stores; vice president: A. W. Littlefield, Barnes and Noble, Inc., New York City; immediate past president: E. C. Rather, University Cooperative Society, Rather, University Cooperative Society, Austin, Tex.; directors: Fred Davis, The Citadel Canteen, Charleston, S. C.; John H. Jenkins, St. Louis University Book Stores, St. Louis; H. H. Hays, Berea College Store, Berea, Ky.; George Racine, Student Book Exchange, Evanston, III.; manufacturer's representative: Charles Lofgren, Sanford Ink Co., Chicago; executive secretary: Russell Reynolds, 189 W. Madison St., Chicago.

Convention: April 27-30, Hotel Statler, Cleveland.

Robert C. Hoag has been named assistant to the president in finance at Newark College of Engineering. He was formerly cost accountant with Federal Telephone and Radio Corporation and Bloomfield Tool Corporation; prior to that he was a statistician for ten years with the Great Atlantic and Pacific Tea Company. He is a member of the National Association of Cost Accountants.



Gertrude D'Amour of Holyoke is rejoining the staff of Mount Holyoke College as office manager of the business office. Formerly college purchas-

ing agent, Miss D'Amour returns after a year and a half with the Educational Buyers Association as assistant to Bert Abrens, executive secretary. Her post has been newly created through the reorganization of the college business office.

Clifford E. Orr, for sixteen years alumni secretary and secretary for public relations at Hobart and William Smith colleges, has been named assistant to the president, Dr. John M. Potter. Erle E. Snelgrove, for the last two years secretary of the news bureau of the colleges, will take over the public relations work in addition to news bureau duties. Henry A. Zimmerman will serve as acting alumni secretary.

Ruth A. Haas, for sixteen years dean of Danbury Teachers College in Connecticut, has been appointed president to succeed Dr. Ralph C. Jenkins who died on October 2. She is the first woman ever appointed to the presidency of a teachers' college in Con-

Linda Kincannon, for the last eight years dean of Finch Junior College, died recently as the result of a stroke. She was 54 years of age. She was a recognized specialist in personnel guidance.

Walter Parkes, associate director of public relations for Methodist educational institutions, died on November 12 after a brief illness resulting from a service-incurred disability while stationed with the army in England.

College Business

VOLUME I

JULY TO DECEMBER, INCLUSIVE
1946



COLLEGE AND UNIVERSITY BUSINESS CHICAGO 1946



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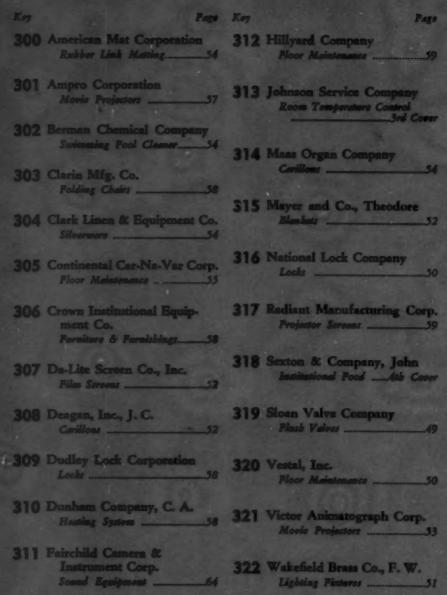
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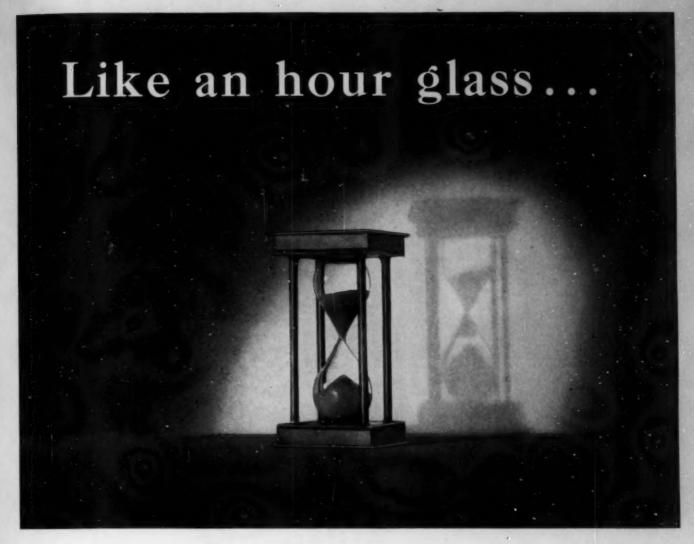
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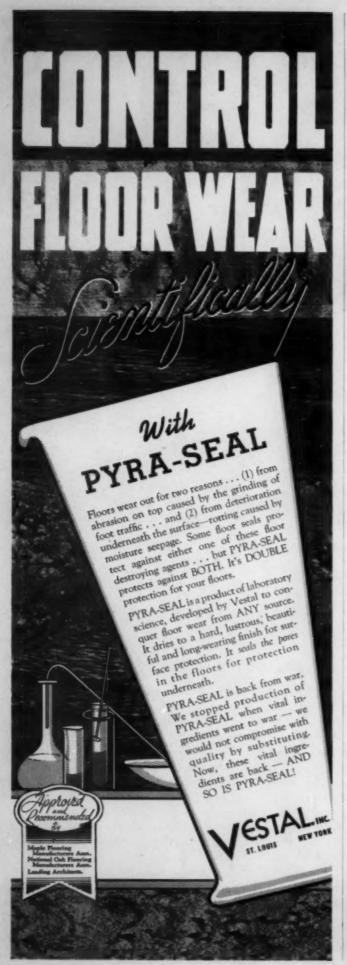
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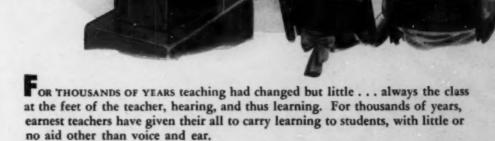
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A BETTER WAY TO **CLEAN POOLS**

Use SAF-T-KLENZ . . . the magic powder that softens algae, rust stains, lime formations, soap and grease deposits and other grime of long standing that defies ordinary cleaners. Leaves floors and swimming pool decks practically slip-proof. Used for more than 30 years by leading schools, colleges, YMCA's and industrial plants. Harmiess to hands, clothing and drains. Shipped direct from factory in dry powder form. Very economical.

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Write for free trial sample and complete details.

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WRITE FOR Silverware Catalog

Established 1899

Clark Linen & Equipment Co.

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MATTING

FLOOR for Promoting Safety . Providing Comfort . Reducing Fatigue **Furthering Sanitation**

EZY-RUG Rubber Link MATTING

Traps dirt at the door and prevents tracking through building, reduces cleaning and redecorating costs. For entrances and corridors. Available with lettering.

TUF-TRED TIRE FABRIC

MATTING
For corridors, entrances, shower and locker rooms, kitchens, back of counters, around machinery.
%" thick, up to 6' wide, any length.



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AMERITRED SOLID PLASTIC FRICTION MATTING For ramps, stairs, landings, shower and locker rooms, entrances, in front and back of counters. Good scrapeage. 29" x 62" x 9/64" sections. Can be laid side by side, or trimmed for amail or odd shaped areas.

AMERICAN Counter-Tred MATTING
A durable rubber and cord matting for lavatories, shower and locker rooms, swimming pools, and behind counters. "" thick, approximately 24" wide, any length.

AMERIFLEX Hardwood Link MATTING
Links are held on galvanized steel springwire framework. Can be rolled or folded.

"WALRUS HIDE" Roll-Rubber MATTING A quality runner for hallways, corridors and aisles, approximately 60 yards long.

Write for prices and folder "A Mat for Every Purpose."

AMERICAN MAT CORPORATION Etell Adams Street

No Finer Tribute

Through the long, long years the proud, clear music of MAAS Genuine Cathedral Chimes will pay reverent homage to the memory of those we have loved. . . .

No memorial provides a finer tribute than this that the past may live on in the melody and tones of the world's most beautiful music.

MAAS Chimes are made not only to provide superb outside chimes, or carillons, but inside organ cathedral chimes as well. A dealer near you will arrange a demonstration on request.



SEND FOR DESCRIPTIVE FOLDER DEPT. 8, 3015 CASITAS AVENUE LOS ANGELES 26, CALIFORNIA



Real Cost vs. Dollar Cost

This book gives the answers
... when it comes to
FLOOR TREATMENTS...

It's not what you pay per gallon for floor finishing material that counts. The real cost is the satisfaction and service you get per dollar spent. To help you prove to yourself that Continental "18" looks better, stays clean longer, and outwears any floor treatment you now use ... yet costs no more ... Continental Car-Na-Var offers you a guaranteed plan for buying floor treatments.

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Try Continental "18"... made only of finest materials and proven cheapest in the long run in thousands of schools, hospitals, office and public buildings all over America. For full information concerning the Guaranteed Cost Equalization Plan, write for FREE booklet, today!

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CONTINENTAL'S

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THE SUPER FLOOR FINISH

Product of CONTINENTAL CAR-NA-VAR CORP.

1645 E. National Ave., Brazil, Ind.

SPECIALISTS IN HEAVY DUTY FLOOR TREATMENTS

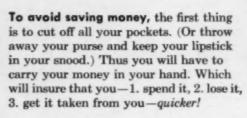
it costs no more!

Vol. 1, No. 6, December 1946



How to Avoid Saving Money

by DANNY KAYE



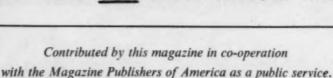
Also to be avoided like crazy are piggy banks and sugar bowls. Keep these out of your home! The kiddies in particular are victimized by such devices, often saving quite a bale of moolah. Be stern even if the little ones cry—remember what money could do for them! And be sure to avoid budgets. It is best to draw your pay and walk down Main Street buying anything you don't particularly hate.

Above all, don't buy any U. S. Savings Bonds—or it's impossible not to save money! These gilt-edged documents pay fat interest—4 dollars for 3 after only 10 years! There is even an insidiously easy scheme called the Payroll Savings Plan by which you buy bonds automatically. Before you catch on, you have closets full of bonds. You may even find yourself embarrassed by a regular income! Get-gat-gittle!

SAVE

SAVE THE EASY WAY ...

BUY YOUR BONDS THROUGH PAYROLL SAVINGS









An economical, compact projector for those who desire high quality 16 mm. sound projection—where such features as still pictures, reverse operation, and the combination of sound and silent speeds are not required.

The "Century" is of extremely simplified design to bring it within the price range of limited budgets — yet it incorporates these basic Ampro features that make for unusual ease of threading and operation — for efficient, brilliant projection and superb tone reproduction — and for long years of satisfactory service even under adverse conditions. These features include: Centralized

Panel Control, Easy Threading System, Fast Automatic Rewind, Triple Claw Movement, Centralized Lubricating System, Rotating Sound Drum, and many others. The "Century" is adapted for use in homes, classrooms, average sized auditoriums and by industry.

Write for complete information—prices, specifications and full details on Amprosound "Century."



2835 N.	Western Avenue, Chicago	18, Illinoi	ia
	se send me full details or n-Film Projector. I am a		Amprosound "Century" 16 mm. sted in:
	Amproslide "2 x 2° Projector		Amprostide Model "30-D" Dual Purpose Projector
	Ampro 8 mm. Siles	nt Projec	tor.
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WRITE FOR BULLETIN THAT DEMONSTRATES A HEATING SYSTEM THAT WILL ECONOMICALLY INCREASE THE COMFORT, AND THUS THE EFFICIENCY, OF STUDENTS AND FACULTY. Sulletin No. 614 C. A. DUNHAM COMPANY 1. III.

OPENS and CLOSES at a touch



Planin STEEL



BESIDES - easy action and precision joining insure extreme quietness in handling.

Clarin's well-known rugged construction; wide, restful seats and contour fitting backs, add up to a chair that satisfies every need for durable, comfort-designed seating.

Write CLARIN MFG. CO.

> 4650 W. Harrison St. CHICAGO 44, ILL.

There are more Clavia steel folding chairs in institutional service than any other make

A Lifetime of Extra PROTECTION Against Pilferage!

EXCLUSIVE design and sturdy construction of Dudley Locks give long years of easy operation with virtually no maintenance, plus this extra protection for school property and students' possessions:

1 When Model RD-2 is snapped shut, the dial (and each of the three tumblers) spins to a new position, eliminating discovery of part of the combination.

Tough, high-tensile stainless steel construction and exclusive design virtually prevent picking and abuse.

3 Dudley Master Chart permits immediate "emergency opening" of any Dudley Lock in your school . . . lock numbers and combinations are listed consecutively.

Full details without obligation.

LOCK CORP.

Dept. 1222 570 W. Monroe St. Chicago 6, III.



Hillyard's STAR Gym

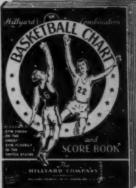
Hillyard's STAR Gym Finish is a high quality product, contributing to added safety for the players with its nonskid, no-glare surface and giving the spectators fast, eye-appeal play. This beautiful finish with its easy maintenance and long wearing qualities is greatly favored by many of the country's best known maintenance engineers. Successful Coaches and famous winning teams agree that it is a great surface to play upon.

There is a Hillyard Floor Treatment Specialist in your community with answers to any vexing floor problem, his advice on proper floor treatments and maintenance is given free, call or wire us today, no obligation.

Finish. of Superiority SUPER TOUGH

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Free . TO COACHES OFFICIALS, THIS NEW CHART AND SCORE BOOK ECONOMICAL



DISTRIBUTORS...HILLYARD CHEMICAL CO ST. JOSEPH 1, MO ... BRANCHES IN PRINCIPAL CITIES 1947 BROADWAY, NEW YORK 23, N.Y. 370 TURK ST., SAN FRANCISCO 2, CALIF.

Your pictures POP OUT clearly-brilliantly with the New 1947 RADIANT SCREENS

The amazing "Hy-Flect" glass beaded surface of the new 1947 Radiant screens gives your pictures greater realism, more depth than ever before. Thousands of tiny glass beads firmly embedded in the pure white plastic surface reflect more light...reproduce your pictures with a sharpness and clarity that seems to "pop" the pictures right out. Black and white pictures have greater contrast...colors are reproduced more vividly. You get all this in the New 1947 Radiant Screens.

Plus all these Wonderful Exclusive New Features

- 1. Automatic Log Opening (Pat. Pending)
 2. Screen Leveller (Pat. Pending)
- 3. Shakeproof Safety Catch
- 4. Feather Touch Adjusting Handle (U. S. Patent)
- 5. Double-Action Auto-Lock (Pat. Pending)
- 6, Built-In Shock Absorbers (Pat. Pending)
- 7. Automatic Leg-Lock 8. Rubber-Ball Tripod Feet
- 9. Triangular Steel Tube Construction
- 10. Automatic Leg Adjustment
- 11. Finger Grip Carrying Handle
- 12. Streamlined Design and Duo-col

The New 1947 Radiant Screens offer instant adjustment, quick set up...finer, clearer pictures...under all projection conditions

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Send for FREE Screen Guide

"Secrets of Good Projec-tion," a 32 page booklet, gives proper screen sizes, correct projection lenses, tips for improving pro-

jection and many oth valuable facts. Mail coupon for your FREE copy.

Radiant Manufacturing Cerp. 1217 S. Talman Ave., Chicago 8, III.

Send me FREE copy of "Secrets of Good Projection"—also circular showing complete line of Radiant Portable, Wall, Ceiling and Table Screens.

The Radiant "D!" here likes trated is portable, sturdy, com pact, easily set up, quickly adjustable. The Radiant line in cludes Wall, Ceiling an Table Models in sizes 22"

WHAT'S NEW.

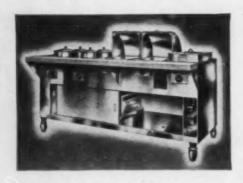
The easiest way to get more information about the new products described in this section is to use the postage paid card opposite page 48. Just circle the key number on the card which corresponds with the number in the headline of each item. COLLEGE and UNIVERSITY BUSINESS will send your request to the manufacturer.

New Type of Hot Food Table

CUB 283

Operates on Dry Electric Heat

Operating on dry electric heat, the new type of electric hot food table announced by S. Blickman, Inc., requires no water or steam. Its outstanding feature is the in-



dividual electric heating unit and thermostat for each section. Any single unit can be removed easily without disconnecting wires or interrupting the continued operation of the other units. The surrounding of each heating unit with an asbestos-lined sheet metal enclosure results in conservation of power and prevents loss of radiant heat, thus providing comfortable working conditions.

Use of solid, stainless steel in the top and in all insets, pans and covers is said to ensure sanitation and long service life, and the seamless construction of the top means easy cleaning. Tables are available with various top arrangements and with open, semienclosed or fully enclosed understructures. The fully enclosed model shown is equipped with electric heating facilities and thermostat control for the plate warmer section.—S. Blickman, Inc., Weehawken, N. J.

Radiant Heating Control

CUB 284

Discussed in Illustrated Booklet

Superintendents of buildings and grounds interested in the application of effective control to radiant heating installations will want to see the Johnson Service Company's new booklet, "How to Control Radiant Heating." The discussion presented is based on the company's own experience and on reports of various pipe and tubing manufacturers who have been concerned with radiant surfaces. Intended as an "engineering report," the booklet is illustrated with diagrams.

The essential of Johnson Radiant Heating Control is the Duo-Stat which controls the temperature of the water supplied to the radiant heating coils according to the outdoor temperature. Said to be fundamentally correct, it ensures that a change in heat input to the radiant surfaces will occur immediately upon a change in weather conditions. The ratio between the change in the controlled temperature and the change in outdoor temperature is determined in the same manner as for a direct radiator system and is stated mathematically in the booklet. To obtain a copy, Edition No. 4 should be requested.—Johnson Service Company, 507 East Michigan Street, Milwankee 2, Wis.

Business Machine

CUB 285

Employs Electronics for Multiplication

The IBM electronic multiplier, the first business machine to employ electronics for multiplication, has been added by International Business Machines Corporation to its line of products utilizing the punched card principle, according to Thomas J. Watson, president. The announcement will be of interest to institutions from the standpoint of training students as well as from a practical angle wherever mechanical accounting is employed.

The electronic multiplier can multiply six digits by six digits and punch 12 digit answers in cards at the rate of 100 a minute, thus reducing the time of multiplying in large volume. The actual multiplication is complete in approximately one sixtieth of a second. The new machine is the product of research in the application of electronics to business machines for commercial use as conducted for many years by the manufacturer.—International Business Machines Corporation, World Headquarters Building, 590 Madison Avenue, New York 22, N. Y.

Synchronous Program Clocks

CUB 286

Provide Automatic Control of Signals



Installation of Montgomery Synchronous Program Clocks assures accurate and dependable automatic control of all types of signals, such as bells, horns, lights, sirens and gongs, according to the manufacturer. Once set, they continue to follow an exact schedule until reset, and no tools are required to change program schedules when desired.

Six models are available to handle one, two or four program circuits of 12 or 24 hour cycles. Automatic calendar

silencing makes it possible to halt signaling over week ends, at night or for any desired period. A toggle switch cuts out the automatic mechanism and a push button permits manual operation.

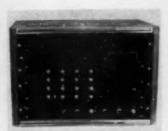
The beauty of these clocks is said to belie their basic function of circuit control. The case is finished in old ivory baked enamel, with dial lettering in Chinese red. Over-all dimensions of the single circuit clock are 8 inches wide, 4 inches deep and 11 inches high.

The signal system will carry a load of 100 watts. Standard models operate on 115 volts, 60 cycles, and other voltages and frequencies are available on special order.-Montgomery Manufacturing Company, Department 268, 549 West Washington Boulevard, Chicago 6, Ill.

Scaling Circuit

CUB 287

Available for Use in School Laboratories



The new Potter Model No. 85, a 100 K.C. Decimal Scaling Circuit, is now available for use in school and university laboratories. Designed to respond to pulses occurring at rates as high as 100 K.C. per second, this unit is a direct

outcome of atomic energy developments and is said to aid precise determination of radiation intensity as a convenient and reliable decimal scaler in conjunction with Geiger-Mueller radiation detecting circuits. The output is designed for operating a Cenco type of impulse counter; special output circuits for specific requirements can be provided.

It is possible to obtain scaling factors of 10 to 1, 100 to 1, 1000 to 1 or 10,000 to 1 by means of a simple plugging operation. Higher scaling factors are available in other models.

The Model 85 employs four Potter 4 tube decades, which are included with input shaping circuits and power supply. Power consumption is 150 watts at 115 volts, 60 cycles.-Potter Instrument Company, 136-56 Roosevelt Avenue, Flushing, N. Y.

Metal Covered Wood Molding **CUB 288** Has Many Uses on the Campus

Loxit, metal covered wood molding, having the appearance of heavy polished metal but actually light, flexible and comparatively inexpensive, is expected to have countless uses on the campus-from picture framing to interior decorating. General information, including description of the product, lengths, attachments, handling charges and terms of cost, is presented in "Loxit Metal Covered Wood Moulding," which is described as the most nearly complete yet the simplest catalog of its kind; it is available upon request.-The Loxit Moulding Company, 1217 West Washington Boulevard, Chicago 7, Ill.

Dual Purpose Projector

CUB 289

Shows 2 by 2 Slides, 35 mm. Strip Film



Because of its many timesaving features and its simple operation, the new dual purpose Amproslide projector is expected to be particularly valuable for use in colleges and universities. Model 30-D. shown in the illustration in operating position for projecting 2 by 2 slides,

features an automatic snap-action self centering slide carrier. No additional units need to be installed or removed when changing to showing of 35 mm. strip film.

The slide carrier can be operated with one hand and perfect alignment is assured, it is claimed. The design permits removal and insertion of slides without fingers touching the slide surface, thus minimizing the risk of scratching or marring the surface. Newly designed curved film guideways permit easy threading and quick operation and effect a greatly improved projected image, according to the manufacturer.

Amproslide Model 30-D, which operates on 105 to 125 volts A.C. or D.C., has 5 inch, F:3.5 anastigmat projection lens, with coated lens available. The 300 watt lamp is said to provide uniform light with effective heat dissipation because of the special design.—Ampro Corporation, 2835 North Western Avenue, Chicago 18, Ill.

CUB 290 Drain, Pipe Cleaning Machine For Use in Building, Plant Maintenance

The Niard Drain and Pipe Cleaning Machine, light in weight, compact and portable and available with A.C., D.C. or universal motor, has been added to the Roto-Rooter Corporation's line of sewer and drain cleaning equipment. This new machine embodies electrically powered rapidly rotating steel blades mounted on a flexible cable. Through centrifugal force, the rotating blades ride the sidewalls of the pipe at all times, thoroughly removing lime and other obstructions.

The Niard is equipped with several sets of blades of different size and two 37 foot lengths of cable, one 1/4 inch and one 5/16 inch in diameter, thus making it adaptable for any drain cleaning job. As the cables are completely enclosed in the machine, the usual insanitary features of drain and pipe cleaning are eliminated.-Roto-Rooter Corporation, Des Moines 14, Iowa.

Disk Type of Floor Machine CUB 291

Reaches Formerly Inaccessible Areas

Model 15, an extra low, disk type of floor machine for polishing, scrubbing, steel wooling and other maintenance, has been announced by the G. H. Tennant Company. Through the use of a pancake shaped motor centrally mounted over the cleaning disk, the machine has been kept to an overall height of less than 12 inches, thus permitting easy operation in formerly inaccessible places, such as under desks and machinery.

A unique feature of the new machine is its special side polishing brush that cleans and polishes flush with the walls, even polishing the baseboard.

For use on all types of floors, the machine accommodates 15 inch accessories for dry cleaning and burnishing with steel wool, for polishing and scrubbing and for rug cleaning. A steel tank on the machine handle holds water and soap solution for scrubbing.

Weight of the machine equipped for use is about 100 pounds. Illustrated Bulletin 81.9 and additional details about construction and operation of the new machine are available.—The G. H. Tennant Company, 2530 North Second Street, Minneapolis 11, Minn.

Steel Cabinets, Tables CUB 292 Now Available for College Kitchens, Laboratories



Department heads planning replacement of equipment in college kitchens or home economics laboratories will be interested in the Add-A-Unit Harrison Kitchen. Said to be manufactured of the best quality furniture steel, of welded construction, rustproofed

and finished in baked synthetic enamel, these units can be purchased and installed either complete or one by one. Starting with the cabinet shown, for example, base and wall cabinets can be added later in combination or alone.

For science laboratories, there is a complete line of steel tables with various tops, such as stone, stainless steel, bakelite and linoleum; below the tables are substantially built cabinets with doors and with drawer space.

Of news value to purchasing agents trying to fill requisitions is the announcement that these items can be furnished with reasonable promptness.—Harrison Steel Cabinet Company, 4718 West Fifth Avenue, Chicago 44, Ill.

Sound Recording, Playback Equipment CUB 293 Completely Described in New Catalog

Complete information on the Fairchild Camera and Instrument Corporation's professional sound recording and playback equipment has been compiled in a handsome, generously illustrated catalog which the purchasing agent will find to be a helpful guide in filling requisitions for this type of equipment or for answering questions of department heads. Performance curves, as well as detailed specifications, are presented for the Fairchild studio and portable recorders, transcription turntable, amplifier-equalizer, magnetic cutterhead, lateral dynamic pickup and the "Language Master."—The Fairchild Camera and Instrument Corporation, 88-06 Van Wyck Boulevard, Jamaica 1, N. Y.

Small Sized Boiler

CUB 294

Designed for Cleaning Plants, Laundries, Dairies

Kewanee Scottie Junior Boiler has been developed by the Kewanee Boiler Corporation to produce industrial high pressure steam for dry cleaner and pressing establishments, laundries, creameries and dairies. This new small model, added to the economical Portable Return Tubular Scotch Marine Type for High Pressure Steam, is now available in six junior sizes of "steel riveted" quality, fabricated in well balanced proportions, designed for commercial performance of high caliber and backed with top efficiency and service. Its capacity load is from 6 to 30 h.p., 840-4200 square feet, radiation 100 pounds' working pressure.

Grates for coal are stationary, thus eliminating trouble in replacing movable parts. For use of oil or gas, the front furnace extension with refractory nozzle and the rear lining in the high combustion chamber are said to create ideal flame conditions in automatic firing with gun burners.

Scottie Junior is conveniently compact in makeup, yet easily accessible. It is shipped with a complete setup of accessories; mounted on wood skids, it needs no foundation settings. The precast refractory insulation is fitted in place at the factory and no brick-up work is required.

With nominal operating care on the part of the average attendant and burning any fuel, the Scottie Junior will respond readily to normal day by day demands as well as carry extra heavy overloads.—Kewanee Boiler Corporation, Kewanee, Ill.

Underground Pipe Conduit CUB 295 Described in New Bulletin

"Therm-O-Tile, the Permanent Conduit for Underground Pipe Lines" is the title of a new bulletin which gives an up-to-date description of Therm-O-Tile and its numerous advantages. The bulletin, No. 461, comprising four pages, in two colors and well illustrated, is available upon request.

Describing the service afforded by this product, the bulletin points out that the insulation is always kept dry; the efficiency is permanently high; the insulation is surrounded by air; grades are permanently maintained on a "Spread Footing" foundation so that there can be no sagging or condensate pockets; strength is greater than required by the A.S.T.M. even for extra heavy tile; the ultimate cost is the lowest obtainable, and the first cost is competitive. Specifications are included and a portion of the bulletin is devoted to the waterproofing of Therm-O-Tile for submerged conditions.—H. W. Porter and Company, Inc., 818-S Frelingbuysen Avenue, Newark 5, N. J.

Revolutionary Air Conditioning CUB 295 Method Is Granted Basic Patent

A radically new type of air conditioning unit, said to be the first important improvement in removing moisture from the air in many years, has been developed by engineers of the American Coils Company and a basic patent has been issued. As explained by the manufacturer, bodily discomfort results from two kinds of heat, sensible and latent. The former concerns only temperature and is the kind of heat combated by air conditioning systems that merely lower temperature. Latent heat involves relative humidity and the new unit, coping primarily with latent heat, removes moisture from the air without overcooling. The result is dehumidified air in which the normal evaporation of moisture from the body can take place without reducing the temperature of the air to a point conducive to shock when street temperatures are suddenly encountered by an individual's entering or leaving the conditioned area. Self adjusting, the unit permits more cooling on hot, dry days and more removal of moisture on cool, humid days.

Named the Amcoil Comfortaire Conditioner, its operating principle is the simple law of physics that vapor pressures equalize themselves. A cooling coil inside an enclosure creates a low vapor pressure area. Air, with moisture in the form of vapor, entering the unit through small openings in the coil enclosure is attracted to this low pressure area where the moisture condenses and is drained off. Thus relieved of its moisture content, the air flows past the enclosed coil without contacting it and mixes below the coil with such small amounts of cooled air as entered the coil chamber by molecular attraction with the original vapor. The mixture emerges into the room at a degree of both sensible and latent heat most conducive to comfort.

The unit is now available in two floor models, both of which are described in a bulletin issued by the manufacturer.—American Coils Company, 25-27 Lexington Street, Newark 5, N. J.

Flushing Gun

CUB 297

Of Assistance in Toilet Maintenance

A new allpurpose flushing gun, constructed on the basis that water is incompressible, has been developed by the manufacturer of Miller toilet augers. A sudden release of the trigger delivers a hammer blow 621/2 pounds of water in less than 1 cubic foot of space and, according



to rigid tests, definitely removes all obstacles beyond the vent or stack.

An illustrated circular is available on request.—Miller Sewer Rod Company, 4638 North Central Avenue, Chicago 30, Ill.

Streamlined Duplicating Machine

Features Sealed-in-Oil Mechanism



The Red Feather Copy Chief, a streamlined duplicating machine which features a sealed-in-oil mechanism together with many basically different ideas, was introduced at the National Business

CUB 298

Show in New York by means of a specially built model with a glass window. Through this window, the sealed-in-oil mechanism was visible as was the method of synchronizing each paper-handling part with the others. Beginning with the revolving suction feed, all parts are rotary. These precision features, according to the manufacturer, eliminate sudden tensions and produce exceptionally clean cut, hairline register copies.

The inking system has been carefully engineered to provide uniform distribution. The entire drum is inked simply by pouring the ink in the convenient ink well while the machine is in operation, and a cantilever construction inking drum permits changing colors in a few seconds by changing the whole drum. Operation of the Copy Chief is reported to be extremely simple, for only two controls are incorporated and all possible operations are entirely automatic.

Additional information and a descriptive folder are available.—Red Feather Products, Ltd., Redwood City, Calif.

Aluminum Awnings

CUB 299

Offer Economical Lifetime Service

Beauty of appearance combined with cool comfort and the economy of lifetime service are offered in the new patented aluminum awning known as Koolvent. A line of canopies particularly applicable as shelters for walkways and building entrances has been developed also.

Sturdily constructed of aluminum with aircraft type of riveted construction, these revolutionary awnings are lightweight and easy to handle and provide building occupants with a cool, comfortable atmosphere, free from glare and eyestrain. The two exclusive advantages claimed for the Koolvent design are that air is circulated freely through a series of patented vents and louvers which carry away the solar heat as it is produced and that the construction screens out direct sun rays yet admits an abundance of eye-comforting indirect light.

Among important maintenance and safety factors, Koolvent awnings are reported to reduce noticeably the load on summer air conditioning systems, are fireproof, rustproof, will not rot or fade and can be left up winter and summer, thus eliminating the troublesome seasonal maintenance jobs of repairing, putting up, taking down and storing. They protect window sills and frames against the ravages of weather and, by filtering and diffusing light rays, prevent wallpaper, rugs and draperies from fading.—Kool-Vent Metal Awning Corporation of America, Keystone Building, Pittsburgh, Pa.



Any word, any phrase repeated endlessly—until mastered!

Let's SAY a student is studying Russian. A single phrase, "который час?," is giving him trouble. He can't quite master the elusive slavic intonation. He needs to hear, "который час? который час? который час?," repeated again and again — patiently.

But how? By blindly searching for this single phrase on a language record? No. By simply using the new Fairchild Language Master. It's a word or phrase—spotting playback machine. It has an illuminated 'spotting dial' that records the location of any word or phrase on a record. It has a hand operated lever which

returns the pickup to the word or phrase to be repeated. It permits any word or phrase to be repeated again and again until mastered.

How can it be used? Three ways. First, as a self-contained unit complete with amplifier and speaker. Second, without its own amplifier-speaker unit. Simply connect the playback to any existing sound system. Third, with headphones. The output of the crystal pickup will drive a pair of crystal headphones without the amplifier. Headphone use provides quiet listening for libraries or study rooms.

The Fairchild Language Master is also

valuable for musical instruction. It permits concentrated, effective study of musical theory, music appreciation and history directly from recordings. It repeats any musical note or phrase for memorizing or reducing to score. It speeds the teaching of the languages needed for an extensive repertoire.

The Fairchild Language Master—which can be operated from any 110-120 AC light socket—is priced within range of both classroom and student ownership. For complete information address: 88-06 Van Wyck Boulevard, Jamaica 1, New York.

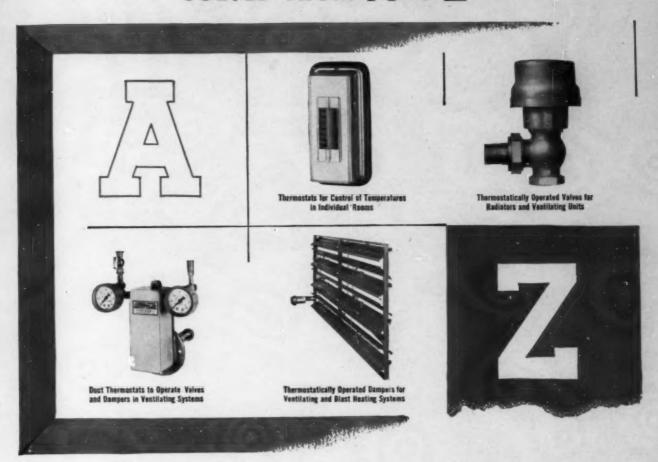


Jairchild CAMERA AND INSTRUMENT CORPORATION



A COMPLETE SERVICE for Colleges

TEMPERATURE CONTROL PROBLEMS
SOLVED FROM A TO Z



For trouble-free, economical and efficient operation of heating plants, good automatic temperature control equipment, *alone*, is not enough. That is why Johnson (established in 1885) renders complete service, from the initial planning stage, on through to proper performance.

lЙ

Й

Johnson not only manufactures a comprehensive line of thermostats, and automatically controlled valves and dampers of all types, but designs the complete temperature control system from "A to Z," in cooperation with college administrators and their architects. Then, Johnson follows through, installing the system and turning it over to the superintend-

ent of buildings in perfect operating order. Years of careful training and broad experience enable Johnson temperature control experts to bring seasoned knowledge to bear on the proper application of automatic temperature regulation equipment to every type of heating and ventilating system.

When your next temperature control problem presents itself, ask your heating and ventilating engineer or contractor about Johnson ... or call a Johnson engineer from a nearby branch office. He is at your service, without obligation. JOHNSON SERVICE COMPANY, Milwaukee 2, Wisconsin. Direct Branch Offices in Principal Cities,

JOHNSON Automatic Temperature and Design - MANUFACTURE - INSTALLATION - SINCE 1885 CONTROL





TABLE SERVICE WITH

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